# ENVIRON HEALTH AND OCCUPATIONAL HEALTH (EHOH)

EHOH 6601 - Public Health Concepts for Non-MPH (1 Credit) This course fulfills the basic public health knowledge requirement for students in MS, PhD and DrPH programs. When taken in conjunction with PUBH 6600 and EPID 6630, all knowledge objectives required by the Council on Education for Public Health for public health students are fulfilled. This course cannot be applied toward the MPH degree. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6614 - Occupational and Environmental Health (3 Credits) Students will learn about the relationship between the environment, workplace and health. Topics include facets of industrial hygiene, air and water pollution, radiation monitoring, toxicology, occupational medicine, policy, environmental justice and sustainability. Methods include risk assessment, GIS and epidemiology.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring.

EHOH 6616 - Toxic Effects of Environmental and Workplace Agents (3 Credits)

Presents an overview of information needed to assess the relationship between the environment, workplace and health. Topics include facets of industrial hygiene, air and water pollution, radiation monitoring, toxicology studies, clinical occupational medicine and biologic monitoring.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6617 - Environmental & Occupational Epidemiology (3 Credits) Overall goal of course is to provide a background in epidemiology of diseases related to environmental and/or occupational exposures. Application of epidemiologic research methods to determine and prevent such diseases will be discussed. Prerequisite: EHOH 6614 Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6618 - Environmental Health Policy and Practice (3 Credits) Examine the environmental policy-making and planning and regulatory and non-regulatory approaches to controlling environmental hazards. A wide variety of topics will be introduced with cross-disciplinary perspectives ranging from water and air to the built environment and climate change. Prereq: EHOH 6614.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring. EHOH 6619 - Environmental Exposures and Health Effects (3 Credits) This course integrates earth sciences, exposure sciences and biological sciences to understand conditions and circumstances of recent env/ occ exposure events, the methods to assess exposures; and related health impacts. Case studies and laboratory exercises are used to guide instruction. Prereq: EHOH 6614. Coreq: EPID 6630. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6620 - Risk Analysis & Decision Making (3 Credits)

A general survey of risk analysis and risk-based decision making covering the basic components of risk assessment, communication, and management and how they are applied in various fields. Prerequisite: EHOH 6614

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6621 - GIS for Public Health Research/Practice (3 Credits) This course will expose students to the fundamentals of Health Geographic Information Systems (GIS), including hands-on software experience, across a variety of application areas in the health sciences, particularly focusing on integrating GIS technologies appropriately into research design and practice.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Summer.

EHOH 6622 - Intro to Public Health in Disasters (3 Credits)

This introductory course focuses on the public health role in community disaster preparedness. It explores the relationship between 10 essential public health services and how these services support the ability to prevent, respond, and rapidly recover from public health emergencies. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Summer.

EHOH 6623 - Geographic Perspective on Global Health (2 Credits) This course will review geographic concepts and tools taking a regional, holistic approach to understanding the world's peoples, places, and processes in order to lay a foundation for an improved knowledge of global health.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Summer.

EHOH 6624 - Infectious Diseases, Environmental Contexts (3 Credits) Students will study the impact of environmental factors, from sanitation to climate, on infectious diseases. Topics include infectious disease emergence, water- and vector-borne diseases, zoonoses and analytic approaches for evaluating environmental determinants of infectious disease. Prerequisite: Students must have completed EPID 6630 and EHOH 6614.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6625 - Global Response to Disasters and Climate Crises (3 Credits)

This course will focus on broad foundational and public health-specific perspectives within international disasters and humanitarian crises including earthquakes, floods, pandemics, civil conflict and more. This includes examination of climate change driven disaster events and climate adaptation and mitigation strategies.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6626 - Disasters and Climate Crises: Practical Applications (3 Credits)

This course advances the skill set for emergency public health professionals who may participate in planning and implementing response activities in climate related and other types of disasters and the challenges of collaborating, coordinating and interfacing with internal and external emergency management response partners.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

#### EHOH 6627 - Water Quality and Public Health (3 Credits)

This course covers public health concerns involving water quality issues ranging from contamination of drinking water to socio-political issues that impact accessibility to clean water. The fundamental concept is that access to clean water is a basic human right.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6628 - Health Protection/Promotion in the Workplace. (3 Credits) Course introduces the principles of Total Worker Health (TWH), an approach to address improving the health, safety, and well-being of workers. TWH is a transdisciplinary field in public health practice and research. Students have the opportunity to critically consider the research basis for TWH and develop applied skills.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring.

EHOH 6629 - Introduction to Occupational Safety and Ergonomics (2 Credits)

This course will form a foundation for understanding of workplace factors important in the prevention of injuries. Students will recognize safety and ergonomic hazards that may lead to injury as well as learn strategies to abate these hazards.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

## EHOH 6630 - EOH Interdisciplinary Symposium (2 Credits)

nterdisciplinary field and consultation experience for students interested in understanding workplace health protection and promotion. Students apply principles and knowledge to effectively protect and promote occupational health and safety by providing consultative services to front range businesses in complex occupational settings. Requisite: Restricted to Occupational Medicine residents. MPH students with instructor permission.

Grading Basis: Letter Grade

Repeatable. Max Credits: 4.

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring. EHOH 6631 - Public Health and Occupational Medicine Seminar (1 Credit)

This course is designed to capture the activities of Occupational and Environmental Medicine residents as advanced, integrated practice of medical and public health in a structured manner, providing a mechanism for resident and programmatic evaluation and academic credit toward the resident MPH degree. Prerequisite: Occupational and Environmental Medicine resident or permission of course director. Instructor consent required.

Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 3.

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring, Summer.

EHOH 6632 - Occupational Health Policy and Practice (3 Credits) OEM residents need to develop knowledge and skills in policy development and implementation in the field of Occupational Health. This course will develop deep comprehension of the Colorado Workers' Compensation system and the Division's efforts to comply with the legislative charge to assure appropriate medical care at a reasonable cost. Requisite: Occupational and Environmental Medicine resident or permission of course director; completion of the Division of Workers Compensation Level II Accreditation course. Instructor consent required. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring.

#### EHOH 6633 - International Travel and Health (1 Credit)

This course is designed to help students understand and respond to health and safety risks that accompany international travel. It emphasizes using available resources to create recommendations based on both travel itinerary and specific activities. Some medical subjects are included but medical jargon will be avoided. Prerequisites: This course is required for all CSPH students planning international travel for any independent coursework, Practicum and/or Capstone.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring.

EHOH 6634 - Spec Professions Protecting/Promoting Worker Health (1 Credit)

Introduction to multiple occupational health professions including industrial hygiene, ergonomics, occupational health psychology, occupational safety, health physics, occupational medicine, epidemiology, health promotion and wellness, program evaluation and risk

management. Practice issues, current research and methods are covered. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6635 - Climate Change and Health (3 Credits)

This course will study the potential health impacts of climate change with an emphasis on understanding the state of the science, and developing skills to identify vulnerable populations, evaluate climate adaptation and mitigation measures and communicate with stakeholders.Prerequisite: EHOH 6614

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall. EHOH 6636 - Occupational Safety and Ergonomics with Journal Clubs (3 Credits)

This course will form a foundation for understanding of workplace factors important in the prevention of injuries. Students will recognize safety and ergonomic hazards that may lead to injury as well as learn strategies to abate these hazards. Students will apply knowledge gained during the course during student-led journal clubs.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6637 - Occup & Environ Health Working the West Industry Tours (1 Credit)

Interdisciplinary field experience meant to engage students in a variety of high-risk Colorado industries. Students will spend one week traveling around Colorado touring 5 uniquely hazardous work environments to receive first-hand experience of occupational hazards and get exposure to occupational safety and health promotion disciplines.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Summer.

EHOH 6638 - Communication Skills for Public Health Impact (3 Credits) Experiential approach to training public health students to become better communicators using examples from environmental and occupational health. Grounded in theory, but focusing on practical skill development, this course will prepare students for common scenarios in which they will be called upon to state the case for public health.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6639 - Occupational Health Psychology (3 Credits)

This course seeks to advance understanding of both organizational and individual factors that influence total worker health. The course includes an introduction to organizational psychology, seminal and current research and best practices regarding key topics and issues in occupational health psychology.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6640 - The Built Environment and Public Health (3 Credits) This course provides and introduction to the built environment and its impact on public health examining how specific features within the built environment and related policies (global, national and local) affect human health outcomes. The course will have a specific focus on regional and local built environment issues.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 6641 - Critical Policies in Global Health Engagement (3 Credits) This course will provide a foundation of knowledge in the critical policies which govern global health engagement. Providing insights from experienced professionals, and using key case studies to highlight each policy, students will emerge with a pragmatic understanding of how these policies function during times of acute crisis. Suggested Prerequisite: EHOH 6625

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring. EHOH 6642 - Climate and Disaster Mental Health (3 Credits) Contemporary issues in climate and disaster mental health with an emphasis on natural hazards, mass violence, disease outbreaks, civil conflict and forced displacement within a broader understanding of the pathways between mental health and climate change. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6643 - Air Quality and Public Health (3 Credits)

This course will provide a broad perspective on public health concerns related to air pollution and air quality. Topics include: air pollution sources; effects on human health and the environment; how climate change impacts air; air quality standards, sampling, monitoring and health assessments; bioterrorism; accessibility to clean air. Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 6650 - MPH Research Paper (1-2 Credits)

Independent research project resulting in a publishable paper. All projects will involve the analysis of primary or secondary data. Permission of Department required.

Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 2.

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring, Summer.

EHOH 6656 - Environmental Data Science for Public Health (3 Credits) Introduction to acquisition, organization and analysis of geospatial data relevant to public health. Data sources covered will include ground-based air quality and weather sensors, remote sensing (satellite) products, climate and weather model output and data on water quality, traffic and mobility, and housing and socio-demographics. Pre-requisite: BIOS 6601/ BIOS 6602 or BIOS 6611/BIOS 6612 or a year of equivalent graduate level statistics or permission of instructor. Cross-listed with EPID 6656. Grading Basis: Letter Grade

Typically Offered: Fall.

EHOH 6670 - Special Topics: Environmental & Occupational Health (1-3 Credits)

Special interest areas of current environmental and occupational research and practice are presented and analyzed. The course format is lecture and discussion or seminar. Check the CSPH website for offerings and topics for this course each semester.

Grading Basis: Letter Grade

Repeatable. Max Credits: 999.

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring, Summer.

EHOH 6710 - Disasters, Climate Change and Health (3 Credits) This course provides a review of the impacts of all types of disasters and climate change on human health, using a broad framework of preparedness, mitigation, response, recovery, with an emphasis on vulnerability and adaptation. Crosslisted GEOG 5710.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring. EHOH 6840 - Independent Study: Environmental and Occupational Health (1-3 Credits)

Faculty directed independent study in topics related to environmental and occupational health. Department permission required.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring, Summer.

EHOH 6990 - MPH Capstone Preparation - EHOH (1 Credit) MPH Capstone Preparation will focus on developing the basis for a strong capstone project, culminating in the finalization of the capstone proposal that meets the expectations of the concentration. Because identification of a preceptor, location and topic for a capstone project should be completed within the first two weeks of the semester, students are highly encouraged to begin this process prior to enrollment, with guidance from their advisor.

Grading Basis: Satisfactory/Unsatisfactory w/IP

This course is restricted to students with a MPHD-MPH plan of study only.

Typically Offered: Fall, Spring.

#### EHOH 7030 - DrPH Directed Reading (1-2 Credits)

DrPH students prepare for comprehensive exams and dissertation research by becoming an expert in specific areas of research, including understanding of the historical development of specific areas, current research findings in specific areas, and current practice. Requires permission of DrPH Program Director and instructor consent. Prerequisite: Requires permission of DrPH Program Director and Instructor consent.

Grading Basis: Satisfactory/Unsatisfactory w/IP

Repeatable. Max Credits: 2.

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall, Spring, Summer.

EHOH 7401 - Climate Change and Worker Health (3 Credits) This course builds on the student's understanding of climate-related health effects by examining how work design and organization, occupational exposures, and unique worker vulnerability contribute to the risk of injury or illness. Students will also examine specific mitigation and adaptation strategies and implementing these strategies.

Grading Basis: Letter Grade Typically Offered: Spring.

EHOH 7402 - Advanced GIS for Public Health Research and Practice (3 Credits)

This course expands on the fundamentals of data management and basic analysis of spatial data so that the student can analyze space/time data that is commonly collected for environmental health, epidemiology and other public health disciplines. Spatial analysis using ESRI's ArcGIS Pro software, concepts of geostatistics, and using MATLAB functions and programming to model space/time random variables are covered. Students will gain the skills to model variables that change over space and time such as air pollutants, water pollutants, infections, etc. Grading Basis: Letter Grade

Typically Offered: Fall.

EHOH 7403 - Research Methods: Climate, Disaster and Humanitarian Perspectives (3 Credits)

This is a doctoral level practical research proposal building course, focused on mixed methods approaches for testing health/public health interventions in climate change-affected, disaster and humanitarian settinas.

Grading Basis: Letter Grade Typically Offered: Summer.

### EHOH 7405 - Advanced Communication Skills for Public Health Impact (3 Credits)

This doctoral level course offers an experiential approach to becoming more effective communicators and leaders in public health. Grounded in theory it will focus on advanced verbal and written skill development to prepare students to tackle tough scenarios in which they will be called upon to state the case for public health, especially focusing on non-public health/non-scientific audiences. The course will emphasize advanced communication skills needed to produce clear and effective messages through the lens of public health leadership.

Grading Basis: Letter Grade

Typically Offered: Spring.

EHOH 7631 - Advanced Methods in Environmental & Occupational Health (3 Credits)

This course will focus on five areas of advanced methodology for EOH: exposure assessment, toxicology, epidemiology, built environment, and worker health. Methods covered include survey design, environmental sampling, risk assessment, biomarkers, and on issues associated with analysis of secondary datasets. First of two course series. Prereq or Coreg: EHOH 6614

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Fall.

EHOH 7632 - Advanced Field Methods in EOH (1 Credit)

This course follows and will build on the Advanced Methods in EOH course (EHOH 7631) where the EOH DrPH students prepare an NIH R21style grant proposal. This course will then provide practical field and laboratory applications on the project from the Fall course that is based on the students' interests. Prerequisite: EHOH 7631 Instructor consent required.

Grading Basis: Letter Grade

A-PUBH1 Graduate students and public health certificate students only. Typically Offered: Spring.

EHOH 8990 - Doctoral Thesis (1-10 Credits)

Doctoral thesis work in Environmental and Occupational Health. Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 10.

Typically Offered: Fall, Spring, Summer.

EHOH 8991 - DrPH Dissertation-Environmental & Occupational Health (1-10 Credits)

DrPH Dissertation work in Environmental and Occupational Health Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 10.

A-PUBH1 Graduate students and public health certificate students only. Additional Information: Report as Full Time.

Typically Offered: Fall, Spring, Summer.