# DIVISION OF ENVIRONMENTAL HEALTH SCIENCES CURRICULUM & DEGREE INFORMATION



## OCCUPATIONAL AND ENVIRONMENTAL EPIDEMIOLOGY (PhD)

This curriculum is designed for individuals with masters level training in epidemiology. Prior course work in specific areas may substitute for some of the required courses upon consultation with advisor.

### **FACULTY:**

Bruce Alexander, PhD; Jeff Bender, DVM; Tim Church, PhD; Susan Gerberich, PhD; Craig Hedberg, PhD; Hyun Kim, SciD; George Maldonaldo, PhD; Jeff Mandel, MD, MPH; Marizen Ramirez, PhD

#### **DIVISION CORE COURSES**

PUBH 6102 Issues in Environmental Health (2 cr., fall)
PUBH 61xx New compound EnHS course (4 cr., spring)

#### EPIDEMIOLOGY AND BIOSTATISTICS CORE METHODS

Students entering with a masters missing MPH EOE requirements may need to take the missing preps for the following PhD required courses

PUBH 8341 - Advanced Epidemiologic Methods: Concepts (3 cr)

PUBH 8342 - Advanced Epidemiologic Methods: Applications (3 cr)

PUBH 8300 - Topics: Epidemiology (1-4 cr)

PUBH 7401 - Fundamentals of Biostatistical Inference (4 cr)

GRAD 8200 - Teaching and Learning Topics in Higher Education (1 cr)

### OCCUPATIONAL AND ENVIRONMENTAL EPIDEMIOLOGY CORE

PUBH 6140 - Occupational and Environmental Epidemiology (2 cr)

**PUBH 6130** - Occupational Medicine: Principles and Practice (2 cr)

PUBH 6193 - Advanced Topics in Human Exposure Science (2 cr)

PUBH 8120 - Occupational Health and Safety Research Seminar (1 cr)

PUBH 6742 - Ethics in Public Health: Research and Policy (1 cr)

#### ADVANCED EPIDEMIOLOGY AND STATISTICS (6-10 CR)

**PUBH 6363** - Design and Analysis of Group-Randomized Trials in Epidemiology (3 cr) or

PUBH 7402 - Biostatistics Modeling and Methods (4 cr) or

PUBH 7407 - Analysis of Categorical Data (3 cr) or

PUBH 7420 - Clinical Trials: Design, Implementation, and Analysis (3 cr) or

PUBH 7430 - Statistical Methods for Correlated Data (3 cr) or

PUBH 7435 - Latent Variable Measurement Models and Path Analysis (3 cr) or

PUBH 7440 - Introduction to Bayesian Analysis (3 cr) or

PUBH 7450 - Survival Analysis (3 cr) or

PUBH 7460 - Advanced Statistical Computing (3 cr) or

PUBH 8142 - Epidemiologic Uncertainty Analysis (2 cr) or

EPSY 8268 - Hierarchical Linear Modeling in Educational Research (3 cr) or

**EPSY 8282** - Statistical Analysis of Longitudinal Data (3 cr)



Program Coordinator Khosi Nkosi Email: nkosi001@umn.edu Phone: 612-625-0622



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#### CONTENT AREA AND SUPPORTING COURSEWORK (10-15 CR)

PUBH 6120 - Injury Prevention in the Workplace, Community, and Home (2 cr)

PUBH 6112 - Env Health Risk Assessment: Human Health Risks from Exposure to Chemicals (2 cr)

PUBH 6100 - Topics: Environmental Health (0.5-4.0 cr)

PUBH 6150 - Interdisciplinary Evaluation of Occupational Health and Safety Field Problems (3 cr)

PUBH 6162 - Biomarkers (2 cr)

PUBH 6170 - Introduction to Occupational Health and Safety (3 cr)

PUBH 6173 - Exposure to Physical Agents (2 cr)

PUBH 6181 - Surveillance of Foodborne Diseases and Food Safety Hazards (2 cr)

PUBH 6182 - Emerging Infectious Disease: Current Issues, Policies, and Controversies (3 cr)

**PUBH 6355** - Pathophysiology of Human Disease (4 cr)

**PUBH 6381** - Genetics in Public Health (2 cr)

PUBH 6385 - Epidemiology and Control of Infectious Diseases (2 cr)

PUBH 6387 - Cancer Epidemiology (2 cr) PUBH 6389 - Nutritional Epidemiology (2 cr)

PUBH 6915 - Nutrition Assessment (2 cr)

VMED 8090 - Epidemiology of Zoonoses and Diseases Common to Animals and Humans (3 cr)

VMED 5180 - Ecology of Infectious Disease (3 cr)

PUBH 6192 - Measurement and Properties of Air Contaminants (2 cr)

PUBH 6193 - Advanced Topics in Human Exposure Science (2 cr)

PUBH 6880 - Introduction to Public Health Informatics (2 cr)

PUBH 6813 - Managing Electronic Health Information (2 cr)

PUBH 6814 - Data and Information for Population

TOTAL CREDITS: 70 minimum (electives in consultation with advisor)

