Environmental Health MS

The Environmental Health (EH) MS program addresses environmental and occupational health concerns as they relate to public health in Minnesota, the United States and around the world. While completing program requirements, students have the opportunity to explore their own interests by choosing one of the eight areas of emphasis. Students must complete a minimum of 30 credits. To complete program requirements, students will choose electives, in consultation with their academic advisor, which may include credits towards a minor.

CORE REQUIREMENTS

14-15 CREDITS

PubH 6102 Issues in Environmental and Occupational Health (2 cr)
PubH 6742 Ethics in Public Health: Research and Policy (1 cr)
or
PubH 6741 Ethics in Public Health: Professional Practice and Policy (1 cr)
PubH 6250 Foundations of Public Health (2 cr) *
PubH 6320 Fundamentals of Epidemiology* (3 cr) **or**
PubH 6341 Epidemiologic Methods I (3 cr)
PubH 6414 Biostatistical Literacy (3 cr) **or**
PubH 6450 Biostatistics I (4 cr) **or**
STAT 5021 Statistical Analysis** (4 cr)
PubH 7195 MS Environmental Health Sciences Plan B Project (3 cr)**** **or**
PubH 8777 Thesis Credits: Master's (10 cr)****
**Required for students who do not have an MPH or a bachelor's degree in Public Health from CEPH-accredited school or program.*
*****Students choose whether to complete a Plan A or Plan B project in consultation with their advisor*

ELECTIVES

Students choose electives in consultation with their advisors. These elective courses may include courses from the following specialty areas. MCOHS trainees must work their advisors to choose electives that meet the requirements of their traineeships

ENVIRONMENTAL CHEMISTRY

***Students strongly encouraged to take STAT 5021 instead of PubH 6450.*
PubH 6190 Environmental Chemistry (3 cr)
EEB 5601 Limnology (3 cr)
CEGE 5541 Environmental Water Chemistry (3 cr)

ENVIRONMENTAL INFECTIOUS DISEASE

PubH 6180 Ecology of Infectious Diseases (3 cr)
PubH 6182 Emerging Infectious Diseases: Issues, Policies, & Controversies (3 cr)
PubH 6184 Field and Laboratory Methods in Public Health Entomology (2 cr)
PubH 6385 Epidemiology and Control of Infectious Diseases (2 cr)

ENVIRONMENTAL & OCCUPATIONAL EPIDEMIOLOGY

PubH 6450 & PubH 6341 required.
PubH 6140 Occupational and Environmental Epidemiology (2 cr)
PubH 6342 Epidemiologic Methods II (3 cr)
PubH 6451 Biostatistics II (4 cr)
PubH 6150 Interdisc. Eval of Occ Health & Safety Field Probs (3 cr)
PubH 6170 Introduction to Occupational Health & Safety (3 cr)

EXPOSURE SCIENCE

PubH 6450 required.
PubH 6112 Environmental Health Risk Assessment: Application to Human Health Risks from Exposure to Chemicals (2 cr)
PubH 6162 Biomarkers (2 cr)
PubH 6175 Environmental Measurements Laboratory (2 cr)
PubH 6190 Environmental Chemistry (3 cr)
PubH 6192 Measurement and Properties of Air Contaminants (2 cr)
PubH 6193 Advanced Topics in Human Exposure Science (2 cr)

FOOD SAFETY

PubH 6110 Foodborne Hazards (2 cr)
PubH 6181 Surveillance Foodborne Diseases & Food Safety Hazards (2 cr)
PubH 6182 Emerging Infectious Diseases: Issues, Policies, & Controversies (3 cr)
PubH 6183 Theory & Practice of Outbreak Investigations (1 cr)
PubH 6385 Epidemiology of Infectious Diseases (2 cr)
PubH 7210 Global Food Systems (0.5 cr)
FSCN 5131 Food Quality (3 cr)

INJURY & VIOLENCE EPIDEMIOLOGY & PREVENTION

**Students required to take PubH 6341 and PubH 6450.*

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PubH 6120 Injury Prevention in Workplace, Community & Home (2 cr)
PubH 6123 Violence Prev & Control: Theory, Research, App (2 cr)
PubH 6342 Epidemiologic Methods II (3 cr)
PubH 6451 Biostatistics II (4 cr)
PubH 8120 Occupational & Env Health & Safety Research Sem. (2 cr)
PubH 6150 Interdisc. Eval of Occ Health & Safety Field Probs (3 cr)
PubH 6170 Introduction to Occupational Health & Safety (3 cr)

TOXICOLOGY

Prerequisites: basic sciences bachelor's degree, completion of organic chemistry, biochemistry, cell biology & physiology courses. Students who have not completed prereqs must take courses during MS training.
PubH 6112 Environmental Health Risk Assessment: Application to Human Health Risks from Exposure to Chemicals (2 cr)
PubH 6159 Principles of Toxicology I (2 cr)
PubH 6160 Principles of Toxicology II (3 cr)
PubH 6161 Regulatory Toxicology (2cr)
PubH 8161 Current Literature in Toxicology (1 cr)

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