Occupational and Environmental Health

Head

- Peter S. Thorne

Graduate degrees: M.S. in occupational and environmental health; Ph.D. in occupational and environmental health

Faculty: https://www.public-health.uiowa.edu/oeh-faculty-list/
Website: https://www.public-health.uiowa.edu/oeh/

Courses

Occupational and Environmental Health Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>OEH:4240</td>
<td>Global Environmental Health</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:4260</td>
<td>Global Water and Health</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:4310</td>
<td>Occupational Ergonomics: Principles</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:4510</td>
<td>Injury and Violence Prevention</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:4530</td>
<td>Global Road Safety</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4540</td>
<td>Statistics for Experimenters</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:4920</td>
<td>Solid and Hazardous Wastes</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:5010</td>
<td>Occupational and Environmental Health Seminar</td>
<td>0-1 s.h.</td>
</tr>
<tr>
<td>OEH:5110</td>
<td>Research Data Management Seminar</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:5410</td>
<td>Occupational Safety</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:6110</td>
<td>Rural Health and Agricultural Medicine</td>
<td>3 s.h.</td>
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<tr>
<td>OEH:6120</td>
<td>Current Topics in Agriculture and Rural Health</td>
<td>0-1 s.h.</td>
</tr>
<tr>
<td>OEH:6420</td>
<td>Methods in Exposure Science</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6430</td>
<td>Assessing Nonionizing Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6432</td>
<td>Assessing Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6440</td>
<td>Control of Occupational Hazards</td>
<td>3 s.h.</td>
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</tbody>
</table>

OEH:4920 Solid and Hazardous Wastes
Sources, characteristics, collection, disposal of solid and hazardous wastes; environmental impacts of hazardous waste management; resource recovery systems. Requirements: for OEH:4920—OEH:4240. Same as CEE:4158.

OEH:5010 Occupational and Environmental Health Seminar
Contemporary topics in occupational health, agricultural and comparative medicine, environmental health.

OEH:5110 Research Data Management Seminar
Overview of major issues in quantitative data management; topics include computer file and directory organization, data documentation and lab notebook best practices, data versioning, data sharing and publication, licensing, ownership, preservation of access, reuse, and citation; for students in science, technology, engineering and mathematics (STEM) disciplines. Same as CEE:5110.

OEH:5410 Occupational Safety
Principles and practices of occupational safety; applications in industrial and other occupational settings; interactions with other disciplines.

OEH:5620 Occupational Health
Introduction to occupational health and safety; for graduate students in agricultural health and safety, environmental health, ergonomics, industrial hygiene, injury prevention, occupational epidemiology, and occupational medicine.

OEH:6110 Rural Health and Agricultural Medicine
Clinical orientation of specific health problems of rural residents, agricultural workers; rural health care delivery, socioeconomic issues in agriculture and their effects on health and safety of the agricultural population; occupational health problems, environmental health hazards in rural areas.

OEH:6120 Current Topics in Agriculture and Rural Health
Issues that affect the health of agricultural populations, such as agro-terrorism, antibiotic resistance, genetically modified organisms; current scientific literature.

OEH:6420 Methods in Exposure Science
Principles, with emphasis on recognition of chemical health hazards, physical health hazards at work. Corequisites: OEH:5620, if not taken as a prerequisite.

OEH:6431 Assessing Noise Hazards
Scientific methods to measure noise, assess human noise exposure, and implement technology to control noise exposure.

OEH:6432 Assessing Nonionizing Radiation Hazards
Scientific methods to measure nonionizing, assess human nonionizing exposure, and implement technology to control nonionizing exposure.

OEH:6433 Assessing Ionizing Radiation Hazards
Scientific methods to measure ionizing radiation, assess human ionizing radiation exposure, and implement technology to control ionizing radiation exposure.

OEH:6440 Control of Occupational Hazards
Physical science concepts applied to control of occupational hazards ranging from dusts to mists to vapors; strategies, management issues, personal protective equipment, implementation skills; in-depth instruction on local exhaust ventilation system design.
OEH:6450 Aerosol Technology 3 s.h.
Particle statistics and physics of aerosols, including inertia, diffusion, nucleation, evaporation, condensation, optics, electrical properties; relationship to fields such as agriculture, nanotechnology, environmental and occupational health, atmospheric chemistry, drug delivery.

OEH:6460 Quantitative Exposure Assessment: Study Design and Evaluation 3 s.h.
Principles of designing occupational and environmental exposure assessment studies, analyzing exposure data, and conducting exposure-response evaluations. Prerequisites: OEH:4540.

OEH:6510 Environmental and Occupational Epidemiology 3 s.h.
Overview of methods to interpret and perform environmental and occupational epidemiologic studies with focus on exposure assessment; valuable insights into identifying regional, national, global environmental, and occupational health-related issues. Prerequisites: EPID:4400. Same as EPID:6200.

OEH:6520 Injury Epidemiology 3 s.h.
How epidemiology can be applied to injury prevention and control: epidemiology literature, specific methodological problems involved in the epidemiology of injuries, critical evaluation of research articles. Offered spring semesters of odd years. Prerequisites: EPID:4400. Same as EPID:6510.

OEH:6710 Human Toxicology and Risk Assessment 3 s.h.
Sources, routes of absorption, effects of environmental toxicants affecting man; pathophysiology of toxicant actions, including those of air and water pollutants, metals, pesticides, solvents, food toxicants, chemicals. Requirements: college chemistry and biology.

OEH:6720 Advanced Toxicology 4 s.h.
Hepatic metabolism and toxification mechanisms, pulmonary and immunotoxicology, nervous system poisons and their mechanisms of action, general and molecular concepts of chemical carcinogenesis. Prerequisites: OEH:6710 or (PHAR:6501 and PHAR:6502 and PHAR:6503).


OEH:7010 Problems in Occupational and Environmental Health arr.
Didactic material in occupational and environmental health; may include tutorial, seminar, faculty-directed independent work (e.g., literature search, project, short research project).

OEH:7020 Independent Study in Occupational and Environmental Health arr.
In-depth pursuit of an area in occupational and environmental health requiring substantial creativity and independence.

OEH:7040 Preceptorship in Occupational and Environmental Health arr.
Work experience using knowledge and skills acquired in the classroom; arranged in conjunction with departmental or collegiate activities or with governmental agencies or private industry.

OEH:7050 Occupational and Environmental Health Internship 0.3 s.h.
Comprehensive and integrated application of knowledge acquired in a workplace setting; structured approach to demonstrate skills and knowledge obtained through a workplace experience. Corequisites: OEH:5620 or OEH:4240, if not taken as a prerequisite.

OEH:7060 Research Design in Occupational and Environmental Health 3 s.h.
Development of a research grant proposal based on student’s independent research aims and hypotheses, preparation of accompanying documents for a grant proposal submission, and development of a comprehensive dissemination plan that articulates how academic and lay audiences will be reached with research findings.

OEH:7070 Interpreting Occupational and Environmental Health Research 3 s.h.
Systematic evaluation of methodological strengths and weaknesses of published research studies in occupational and environmental health. Prerequisites: (OEH:5620 or OEH:4240) and (BIOS:4120 or OEH:4540) and EPID:4400.