

## University of Minnesota Industrial Hygiene Student Curriculum

### **School of Public Health Core Requirements:**

(Note: These courses can be taken on-line during Fall, Spring & Summer semesters)

PubH 6020	Fundamentals of Social and Behavioral Science	3 cr
PubH 6320	Fundamentals of Epidemiology	3 cr
PubH 6450	Biostatistics I	4 cr
PubH 6741	Ethics in Public Health: Professional Practice and Policy	1 cr [MPH]
PubH 6742	Ethics in Public Health: Research and Policy	1 cr [MS]
PubH 6751	Principles of Management in Health Services Organizations	2 cr

### **Division of Environmental Health Sciences Core Requirements:**

PubH 6103	Exposure to Environmental Hazards	2 cr
PubH 6104	Environmental Health Effects: Introduction to Toxicology	2 cr
PubH 6105	Environmental and Occupational Health Policy	2 cr
PubH 7194	Culminating Experience: Environmental Health (Lit. Review/Research Paper)	3 cr [MPH]
PubH 7194	Culminating Experience: Environmental Health (Research Paper)	3 cr [MS]
PubH 7196	Field Experience: Environmental Health	3 cr

### **Occupational Health and Safety Core Requirements:**

PubH 6130	Occupational Medicine: Principles and Practice	2 cr
PubH 6150	Interdisciplinary Evaluation of Occupational Health & Safety Field Problems	3 cr
PubH 6170	Introduction to Occupational Health and Safety	3 cr

### **Industrial Hygiene Program Requirements:**

(Note: Most of these courses are offered in alternating years)

PubH 6172	Industrial Hygiene Applications	2 cr
PubH 6173	Exposure to Physical Agents	2 cr
PubH 6174	Control of Workplace Exposures	3 cr
PubH 6175	Environmental Measurements Laboratory	2 cr
PubH 6192	Measurement and Properties of Air Contaminants	2 cr
PubH 6193	Advanced Topics in Human Exposure Science	2 cr
INDUSTRIAL HYGIENE ELECTIVES		at least 6 cr

### **Industrial Hygiene Electives (F = Fall Semester, S = Spring Semester):**

PubH 6100	Topics: Environ. Health (Nanotechnology Health & Safety)	3 cr (S)
PubH 6100	Topics: Environ. Health (Complex Systems Modeling for Population Health)	2 cr (S)
PubH 6112	Environmental Health Risk Assessment	2 cr (S)
PubH 6115	Worker Protection Law	1 cr (F)
PubH 6116	Environmental Law	1 cr (S)
PubH 6120	Injury Prevention in the Workplace, Community, and Home	2 cr (S)
PubH 6131	Working in Global Health	2 cr (S)
PubH 6132	Air, Water, and Health	2 cr (F)
PubH 6140	Occupational and Environmental Epidemiology	2 cr (S)
PubH 6161	Regulatory Toxicology	2 cr (S)
PubH 6162	Biomarkers	2 cr (F)
PubH 6182	Emerging Infectious Disease	3 cr (S)
PubH 6190	Environmental Chemistry	3 cr (F)
PubH 6451	Biostatistics II	4 cr (F&S)
CEGE 4561	Solid Hazardous Wastes	3 cr (S)
CEGE 5551	Environmental Microbiology	3 cr (F)
IE 5511	Human Factors and Work Analysis	4 cr (F)
IE 5513	Engineering Safety	4 cr (F&S)
Kin 5001	Foundations of Human Factors/Ergonomics	3 cr (F)
ME 5113	Aerosol/Particle Engineering	4 cr (F)
PA 5721	Energy and Environmental Policy	3 cr (F)
Other courses approved by your academic advisor		

**MINIMUM TOTAL CREDITS:**

**52 cr**

### Example Industrial Hygiene Student Course Plan

PLEASE NOTE: This course plan is an example; individual course plans may vary depending on the needs and interests of each student

#### **Fall 1**

PubH 6103	Exposure to Environmental Hazards	2 cr	TuTh 5:45 – 7:40 (first 7 weeks)
PubH 6104	Environmental Health Effects	2 cr	TuTh 5:45 – 7:40 (last 7 weeks)
PubH 6170	Introduction to Occupational Health and Safety	3 cr	W 2:30 – 5:30
<i>PubH 6192</i>	<i>Msmt. and Props. of Air Contaminants (odd years)</i>	2 cr	<i>WF 12:20 – 2:15 (first 7 weeks)</i>
<i>PubH 6193</i>	<i>Adv. Topics in Human Exposure Science (odd years)</i>	2 cr	<i>WF 12:20 – 2:15 (last 7 weeks)</i>
PubH 6450	Biostatistics I	4 cr	TuTh 1:25 – 3:20 + lab
<i>INDUSTRIAL HYGIENE ELECTIVES (even years)</i>		2-4 cr	

13-15 cr

#### **Spring 1**

PubH 6105	Environmental & Occupational Health Policy	2 cr	Tu 6:00 – 7:55
PubH 6150	Interdisciplinary Evaluation of OH&S Field Problems	3 cr	Tu 10:10 – 1:10
<i>PubH 6172</i>	<i>IH Applications (odd years)</i>	2 cr	<i>F 9:05 – 11:00</i>
<i>PubH 6173</i>	<i>Exposure to Physical Agents (even years)</i>	2 cr	<i>M 4:40 – 6:40</i>
<i>PubH 6174</i>	<i>Control of Workplace Exposures (odd years)</i>	3 cr	<i>M 4:40 – 7:40</i>
<i>PubH 6175</i>	<i>Environmental Measurements Laboratory (even years)</i>	2 cr	<i>W 12:20 – 4:25</i>
<i>INDUSTRIAL HYGIENE ELECTIVES</i>		2-4 cr	

11-14 cr

#### **Summer**

PubH 7196	Field Experience	3 cr	
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3 cr

#### **Fall 2**

PubH 6020	Fundamentals of Social and Behavioral Science	3 cr	TuTh 11:15 – 12:30
<i>PubH 6192</i>	<i>Msmt. and Props. of Air Contaminants (odd years)</i>	2 cr	<i>WF 12:20 – 2:15 (first 7 weeks)</i>
<i>PubH 6193</i>	<i>Adv. Topics in Human Exposure Science (odd years)</i>	2 cr	<i>WF 12:20 – 2:15 (last 7 weeks)</i>
PubH 6320	Fundamentals of Epidemiology	3 cr	TuTh 3:35 – 5:30
PubH 6741/2	Ethics in Public Health	1 cr	M 10:10 – 12:05 or 12:20 – 2:15 (half semester)
<i>INDUSTRIAL HYGIENE ELECTIVES (even years)</i>		2-4 cr	

9-11 cr

#### **Spring 2**

PubH 6130	Occupational Medicine	2 cr	W 5:00 – 7:00
<i>PubH 6172</i>	<i>IH Applications (odd years)</i>	2 cr	<i>F 9:05 – 11:00</i>
<i>PubH 6173</i>	<i>Exposure to Physical Agents (even years)</i>	2 cr	<i>M 4:40 – 6:40</i>
<i>PubH 6174</i>	<i>Control of Workplace Exposures (odd years)</i>	3 cr	<i>M 4:40 – 7:40</i>
<i>PubH 6175</i>	<i>Environmental Measurements Laboratory (even years)</i>	2 cr	<i>W 12:20 – 4:25</i>
PubH 6751	Principles of Mgmt. in Health Services Organizations	2 cr	on-line
PubH 7194	Culminating Experience	3 cr	

11-12 cr

**TOTAL CREDITS (assuming 6 elective credits)**

**52 cr**

updated October 31, 2016, Peter C. Raynor