DEPARTMENT: Environmental Health

COURSE NUMBER: EH 570   SECTION NUMBER: 000   SEMESTER: Spring 2015

CREDIT HOURS: 3

INSTRUCTOR NAME
Melvin L. Myers, MPA

INSTRUCTOR CONTACT INFORMATION
EMAIL: melvinmyers@charter.net
PHONE: 678.828.9462
SCHOOL ADDRESS OR MAILBOX LOCATION:
OFFICE HOURS: By Appointment

BRIEF COURSE DESCRIPTION
Introduces administrative and regulatory law principles, specific laws (OSHA, SARA, etc.) and pertinent agencies (OSHA, EPA, ATSDR, etc.), and related topics such as risk communication, workers’ compensation, etc. Affords students a working familiarity with all major federal occupational and environmental health statutes as well as examples of state and local statutes. We will incorporate this general knowledge into detailed discussions of historical and contemporary occupational and environmental health policy. Explore the politics, economics, and ethics of occupational and environmental health policy development, and policy options for dealing with environmental health risk.

LIST SCHOOL LEVEL, DEPARTMENT, AND/or PROGRAM COMPETENCIES
One of the basic health competencies in environmental health policy is to “Explain major policy issues in environmental health including regulatory frameworks.”

Comprehend concepts related to disease and injury prevention. Performance indicators for this standard center around identifying what is good health, recognizing health and safety problems, and ways in which the environment and public policies can protect public health.

Assess global forces that influence the health of culturally diverse populations around the world.

Develop the capacity for lifelong learning in public health.

Apply principles of ethical conduct to public health practice.

Prepare health policy briefings suitable for the range of policy stakeholders involved with the formulation and implementation of a health policy under consideration by decision makers.
LIST LEARNING OBJECTIVES ASSOCIATED WITH THE COMPETENCIES

- Explain general principles of occupational and environmental health policy and apply them to human health.
- Identify and explain approaches to the prevention and control of major occupational and environmental risks to human health, ranging from the small scale to the global scale.
- Identify key issues in the management of occupational and environmental health programs, such as legal and ethical challenges.
- Explain major policy issues in occupational and environmental health such as regulatory frameworks that guide employers and others in compliance.
- Explain environmental and occupational health policy concepts.
- Improve oral and written skills in communicating and advocating policy positions to others.

EVALUATION
The total possible points earned is 200. Students will be required to complete 13 formative exams (26 points), two short presentations and two theme papers (25 points each), two essays (20 points each), a mock trial (20 points), a mid-term exercise (15 points), video presentation (15 points), a final exercise (18 points), classroom participation (15 points), and possible bonus credits (1 point).

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A: assigned; D: due; p: theme paper presentation; *submit online; ‡ submit both hard copy and email 200

ACADEMIC HONOR CODE

The RSPH requires that all material submitted by a student in fulfilling his or her academic course of study must be the original work of the student
ENVIRONMENTAL AND OCCUPATIONAL HEALTH POLICY
EH-570, Spring Semester, 2015

<table>
<thead>
<tr>
<th>General Information:</th>
<th>Class begins: January 12, 2015</th>
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<tbody>
<tr>
<td>Time: Mondays, 3:00 p.m.-5:50 p.m.</td>
<td>Spring Break: March 9-13, 2015</td>
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<tr>
<td>Place: Grace Crum Rollins L35 (GCR L35)</td>
<td>Emory Classes End: April 27, 2015</td>
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<td>Credit Hours: 3.0</td>
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<td>Prerequisite: None</td>
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<tr>
<th>Faculty: Melvin L. Myers</th>
<th>Guest Lecturers:</th>
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<tbody>
<tr>
<td>Adjunct Associate Professor</td>
<td>● Sally S. Bethea, Master of City and Regional Planning, honorary doctorate from LaGrange College, founding director of Chattahoochee Riverkeeper.</td>
</tr>
<tr>
<td>Telephone: 678-828-9462</td>
<td>● Daniel R. Rochberg, MS, Visiting Fellow, Rollins School of Public Health, Emory University; Strategic Coordinator, Climate Assistance at US Department of State</td>
</tr>
<tr>
<td>Email: <a href="mailto:melvinmyers@charter.net">melvinmyers@charter.net</a></td>
<td>● W. Allen Robison, Ph.D., Director, Office of Extramural Programs, NIOSH</td>
</tr>
<tr>
<td>Office Hours: By Appointment</td>
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| Teaching Associate: Heather Strosnider, MPH, Student, Environmental Health Sciences PhD Program Epidemiologist, National Center for Environmental Health, CDC | |
| Email: hstrosn@emory.edu | |

| Teaching Assistant: Clarissa A. Delgado, MPH Candidate, 2015 | |
| Email: clarissa.delgado@emory.edu | |

Texts:
2. (2) Environmental Policy and Public Health by Barry L. Johnson, Boca Raton, FL: CRC Press; 2007,

Session 1: Fundamentals for Environmental & Occupational Health Policy 01/12
Lecturer: Myers and Strosnider

Readings: Myers, Occupational Health Policy, Chapters 1-3, 5: Introduction, Public Health, Environmental Health, History; Johnson, Environmental Policy and Public Health, Chapter 1; Fundamentals of Environmental Policy

Topics: Public health policy, prevention models, types of policy

Assignment: OHP Essays 1-2. 20 points each. (due Sessions 4, 12 via hard copy and email)

Assignment: Formative examination 1 (email copy due January 19): Two points per exam. One point for completing all questions, and one point for answering 50% or more of the questions correctly.

1. What is the occupational safety and health problem? (Myers-1)
2. What is an example of a connection between occupational and environmental health problems? (Myers-3)
3. What was the origin of the surveillance-containment model? (Myers-2)
4. What is the definition of policy? (Johnson-1)
5. How was EPA created? (Johnson-3)
6. What is the industrial hygiene model for prevention? (Myers-2, Johnson-1)
7. What are the three levels of prevention? (Myers-2, Johnson-2)
8. Which health field is peculiar to environmental and occupational health? (Myers-2)
9. Who is considered the father of occupational medicine? (Myers-5)
Assignment: Formative examination 2 (email & hard copy due Session 2)
1. What is an alternative policy to command and control? (Johnson, Chapter 2)
2. What are the four sources of law in the United States? (Myers-4; Johnson-3)
3. What are the three traditional defenses against negligence suits? (Myers-4)
4. How is type II error a concern regarding prevention? (Myers-6)
5. What was the Constitutional basis for the Match Act of 1912? (Myers-4, 5)
6. What are the four types of claims regarding an argument? (Myers-6)
7. What are the topoi for writing an issue statement for a policy claim? (Myers-6)
8. What concept did Lindblom refer to in his article, “Science of Muddling Through.” (Myers-6)
9. How can prospect theory be used to influence change in an organization? (Myers-6)

Session 2: Law, Policy Making, and Advocacy 01/26
Lecturer: Myers and Strosnider
Readings: Myers, Occupational Health Policy, Chapters 4, 6: Law & Advocacy; Johnson, Environmental Policy and Public Health, Chapter 2: Steps in Environmental Health Policy Making and Chapter 3: Federal Government’s Environmental Health Structure
Topics: Law, governance, history, advocacy, argumentation
Due: Formative examination 2 (email & hard copy)
Assignment: Theme paper. 25 points. (due session 6; brief oral presentation and draft outline and reference list due session 4)
Assignment: Formative examination 3 (due Session 3)
1. What is meant by the general duty clause? (Myers-7)
2. What are the three types of standards provided to OSHA under the OSHAct? (Myers-7)
3. What steps occurred in OSHA’s promulgation of the vinyl chloride standard? (Myers-7)
4. Why was the air contamination standard rejected? (Myers-7)
5. What role do states play under the OSHAct? (Myers-8)
6. In the case, Marshall v. Barlow’s, Inc., why was an OSHA authority found unconstitutional? (Myers-8)
7. Why has OSHA shifted its priorities to enforcement? (Myers-8)
8. What is OSHA’s egregious policy? (Myers-8)
9. How has the US Justice Department addressed the lack of criminal sanctions under the OSHAct? (Myers-8)

Assignment: Mock trial directions and expectations
Assignment: Formative examination 4 (due Session 4)
1. What is the difference between OSHA and NIOSH? (Myers-9)
2. What is the principle way that NIOSH can influence the creation of a standard? (Myers-9)
3. What organization has jurisdiction over the safety and health of miners? (Myers-10)
4. In mine safety and health, how did confirmation bias relate to scientific paradigms? (Myers-10)
5. What was the consistent cause of Federal mine safety and health legislation over time? (Myers-10)
6. What agency controls occupational safety and health on commercial fishing vessels? (Myers-11)
7. What agency controls occupational safety and health on offshore oil rigs? (Myers-11)
8. What rendered the Noise Control Act dormant? (Johnson, Chapter 4)
9. What has been the impetus for federal environmental statutes? (Johnson, Chapter 4)
Session 4: Occupational Safety & Health Research & Other Protective Legislation 02/09

**Lecturer:** Myers and Robison


**Topics:** NIOSH, Bureau of Labor Statistics, The Mine Act; consumer, transportation, labor, and civil rights statutes; Noise Control Act.

**Due:** Essay 1

**Due:** Brief presentation, outline, and list of references for theme paper 1

**Due:** Formative examination 4

**Assignment:** Formative examination 5 (due Session 5)

1. How did the OSHA Hazard Communication Standard grow to extend to all workers under its jurisdiction? (Myers-14)
2. What agency in the US Public Health Service was created by CERCLA? (Johnson-8)
3. How do RCRA and CERCLA differ? (Johnson-8)
4. What are the 3 R’s of waste reduction? (Johnson-8)
5. What events led to the passage of CERCLA? (Johnson-8)
6. Regarding CERCLA, what does “Superfund” mean? (Johnson-8)
7. What are the three rationales for right-to-know? (Myers-14)
8. What event became the imperative for OSHA action to promulgate a hazard communication standard? (Myers-14)
9. What event became the imperative for Congress to establish right-to-know to communities near chemical manufacturing plants? (Myers-14)

Session 5: Hazardous and Solid Waste & Right to Know 02/16

**Lecturer:** Myers and Strosnider


**Topics:** Resource Conservation and Recovery Act (RCRA) of 1976; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended; Pollution Prevention Act; Hazard Communication; Emergency Planning and Community Right-to-Know Act, right-to-know rights and duties, hazard communication, privacy.

**Due:** Mock Trial 1: *New Jersey State Chamber of Commerce v. Hughey*

**Due:** Formative examination 5

**Assignment:** Formative examination 6 (due Session 6)

1. Why are occupational injuries and diseases considered externalities? (Myers-13)
2. How many workers’ compensation systems are there in the United States? (Myers-13)
3. Does workers’ compensation provide an incentive for injury prevention? Disease prevention? (Myers-13)
4. What advantages and limitations do cost/benefit analysis offer policymakers? (Myers-13)
5. How does cost benefit analysis differ from cost-effectiveness analysis? (Myers-13)
6. What is the difference between direct and indirect costs? (Myers-13)
7. What was EPA’s estimated economic and health benefit of its Clean Air Interstate Rule? (Johnson-5.2.1)
8. How did a tort law case result in a global reduction in burn injuries at McDonald’s? (Johnson-2.5.5)
9. What is the egalitarian approach for placing a value on human life? (Johnson-11.4.2)

Session 6: Workers' Compensation & Environmental Economics 02/23

**Lecturer:** Myers

Topics: Economics, workers’ compensation; other compensation of injury, tort liability, economic analyses, environmental economics, creative destruction, market power, performance incentives, dynamic efficiency

Assignment: Mid-Term Exercise (due Session 8 via email)

Due: Mock Trial 2: International Union, UAAA, UAW et al. v. Johnson Controls, Inc.

Due: Theme paper 1 (hard copy and email)

Due: Formative examination 6

Assignment: Formative examination 7 (due Session 7)

1. Why did the Delaney Clause become problematic? (Johnson-7)
2. What does “restricted-use pesticide” mean? (Johnson-7)
3. Under TSCA, what is the difference between “existing” and “new” chemicals? (Johnson-7)
4. How do trade secrets relate to FIFRA? (Johnson-7)
5. What Acts regulate pesticides in the United States? (Johnson-7)
7. What Constitutional authority was cited for the Federal Meat Inspection Act of 1906 as amended? (Johnson-6)
8. At the Federal and state levels, what two governmental departments have responsibility for food safety? (Johnson-6)
9. What kind of standards must CPSC rely upon as a first priority? (Johnson, Chapter 4)

Session 7: Food Safety, Toxic Substances, Product Safety

Lecturer: Myers and Strosnider

Readings: Johnson, Environmental Policy and Public Health, Section 1.7.8. Product Safety, Section 4.4


Due: Mock Trial 3: Corrosion Proof Fittings v. EPA

Due: Formative examination 7

Assignment: Theme paper 2, 25 points. (due session 11; a brief oral presentation as a work in progress, and a draft outline and reference list are due session 9)

Assignment: Video Presentation (due sessions 13 & 14)

Assignment: Formative examination 8 (due Session 8)

1. What are the five air quality goals under the Clean Air Act? (Johnson-5)
2. What are the “criteria” air pollutants? (Johnson-5)
3. What is an example of an air toxic identified by the National-Scale Air Toxics Assessment? (Johnson-5)
4. What actions are specified in the Clean Air Act for Stratospheric Ozone Protection? (Johnson-5)
5. How was the precautionary principle applied for the control of hazardous air pollutants? (Johnson-5)
6. What kind of permit did EPA issue to prevent significant deterioration of air quality?
7. What are two aspects of control of mobile sources of air pollution? (Johnson-5)
8. What does EPA’s term, “air toxics,” refer to? (Johnson-5)
9. What best explains the success of the Clean Air Interstate Rule? (Johnson-5)

SPRING RECESS: March 09-13, 2015

Session 8: Clean Air

Lecturer: Myers and Strosnider

Readings: Johnson, Environmental Policy and Public Health, Chapter 5; Conniff R. August 2009. The political history of cap and trade. Smithsonian.
Topics: Clean Air Act, Atmospheric Warming
Due: Mid-Term Exercise (via email)
Due: Mock Trial 4: EPA v. EME Homer City Generation (http://www.law.cornell.edu/supct/cert/12-1182)
Due: Formative examination 8
Assignment: Formative examination 9 (due Session 9)

1. What were the two goals of the Water Quality Act of 1972? (Johnson-5)
2. What requirement has been effective for the control of point sources of water pollution under the Clean Water Act? (Johnson-5)
3. What problem does the “total maximum daily load” requirement address? (Johnson-5)
4. What problem did the 1987 amendments to the Clean Water Act address? (Johnson-5)
5. What is the difference between the two types of standards addressed by the Safe Drinking Water Act? (Johnson-5)
6. How do the secondary standards under the Clean Air Act and the Safe Drinking Water Act differ? (Johnson-5)
7. What was the amendment to the Safe Drinking Water Act that aimed to eliminate lead contamination of drinking water from specific sources? (Johnson-5)
8. What does the MARPOL Convention cover? (Johnson-8)
9. The Oil Pollution Act was an amendment to what Act? (Johnson-8)

Session 9: Clean and Safe Water 03/23
Lecturer: Myers and Strosnider
Readings: Johnson, Environmental Policy and Public Health, Chapters 5 & 8: Water Statutes.
Topics: Clean Water Act; Safe Drinking Water Act; Ocean Dumping Act, Oil Pollution Act,
Due: Mock Trial 5: Rapanos et al. v. United States
Due: Brief presentation, outline, and list of references for theme paper 2
Due: Formative examination 9
Assignment: Formative examination 10 (due Session 10)

1. How does Ecoethics (Johnson-2.7) inform the National Environmental Policy Act (Johnson-4.8; Myers-3.6)
2. How does prospective analysis differ from risk assessment? (Myers-16)
3. What steps are involved in risk assessment? (Johnson-11, Myers-16)
4. What is the double standard regarding the assessment of the risk of negative health effects and injuries? (Myers-16)
5. What was the IRLG guidelines for cancer risk assessment used by agencies? (Johnson-11)
7. What aspect of the PACM model (Johnson-2) could explain the demise of the ergonomics standard? (Myers-16)
8. What is the difference between narrative and paradigmatic analysis? (Myers-16)
9. What is the Driesen argument that cost-benefit analysis is not a principle to be followed, but what is it for? (Myers-16)

Session 10: Risk Assessment, Policy Analysis 03/30
Lecturer: Myers and Robison
Readings: Lecturer: Myers
Readings: Myers, Occupational Health Policy, Chapter 16: Occupational Safety and Health Policy Analysis; Johnson, Environmental Policy and Public Health, Chapter 11: Policy Impacts of Risk Assessment
Topics: health risk assessment, ecological risk assessment, injury risk assessment, policy analysis, regulatory rationales, policy transitions, legislation-based reforms, interest groups, narrative and paradigmatic analyses, global policy, political economy, the National Environmental Policy Act.
Due: Mock Trial 6: Industrial Union Department v. American Petroleum Institute
Due: Formative examination 10
Assignment: Formative examination 11 (due Session 11)
1. What is the origin of the term, “Lucifer Effect” and what theory does it refer to? (Myers-15)
2. What are the six strategies for persuasion used in informal leadership? (Myers-15)
3. What are the four fundamental principles of ethics? (Myers-15)
4. What type of leader was Cesar Chavez? (Myers-15)
5. What is another name for fundamental attribution error? (Myers-15)
6. What is John Stuart Mill’s harm principle? (Myers-15)
7. What theory describes OSHA’s response to situation attribution regarding employers? (Myers-15)
8. What are the four OSHA programs that are examples of its leadership orientation corresponding to four levels of employer readiness to comply with the OSHAct? (Myers-15)
9. What situation led to Thiokol giving the go-ahead to launch NASA’s Space Shuttle Challenger? (Myers-15)

Session 11: Leadership
Lecturer: Myers and Bethea
Topics: leadership, ethics
Due: Theme Paper 2 (via hard copy & email)
Due: Formative examination 11
Assignment: Final Exercise (due Session 13)
Assignment: Formative examination 12 (due Session 12)
1. What are the three perspectives on international law? (Myers-12)
2. How was the French ban on the use and sale of asbestos challenged in the international community? (Myers-12)
3. What does the Basel Convention specify? (Johnson-9, Myers-12)
4. What is the meaning of the ILO tripartite structure? (Johnson-9, Myers-12)
5. How have WTO policies affected workers’ rights? (Myers-12)
6. How did the ILO intercede in the textile factory tragedies in Bangladesh? (Myers-12)
7. How did the United States react to the London Convention regarding marine pollution? (Johnson-8)
8. How did REACH adopt the “Precautionary Principle?” (Myers-12, Johnson-9)
9. What is the Agenda 21 approach of “cradle-to-grave?” (Johnson-9)

Session 12: Global Environmental Health and International Policy
Lecturer: Myers and Rochberg
Topics: United Nations environment and human health programs; the new century, environmental trends, the global economy, international policies; global warming; EU Registration, Evaluation, Authorization and Restriction of Chemicals (REACH); sustainable development
Due: Essay 2 (hard copy & email)
Due: Formative examination 12
Assignment: Formative examination 13 (due Session 13)
1. How do the terms environmental racism, justice, and equity differ in meaning? (Johnson-11)
2. Pick one principle of environmental justice and describe how a local government can make it into a policy? (Johnson-11)
3. Name an environmental justice report that was evidence-based? (Johnson-11)
4. How could Agenda 21 be made relevant to environmental justice? (Johnson-11)
5. What did Executive Order 12898 require? (Johnson-11)
6. To what did the Executive Order apply? (Johnson-11)
7. What is an alternative measure for prosperity to GDP per person? (Myers-12)
8. How can the economic environment be reconciled to the WHO definition of health? (Johnson-1)
9. What group of workers is excluded from occupational safety and health protection in the United States? (Myers-2.4)

**Session 13: Environmental Justice 04/20**
**Lecturer:** Strosnider
**Topics:** environmental justice history and issues; health disparities; sustainable development
**Due:** Formative examination 13
**Due:** Video presentations
**Due:** Final Exercise

**Session 14: Review and Future Environmental Impact 04/27**
**Lecturer:** Myers and Delgado
**Topics:** course review; environmental impact of human activity.
**Due:** Video presentations (continued)