ENV H 593 A: Current Topics in Risk Assessment

Autumn Quarter 2019: Risk Perception & Risk Communication

Credits: 2

Instructors:

Elaine M. Faustman, PhD, DABT
Professor, Department of Environmental and Occupational Health Sciences and Director, Institute for Risk Analysis and Risk Communication (IRARC)
Office: 4225 Roosevelt Way NE, Suite 100
Phone: 206-685-2269
E-mail: faustman@uw.edu
Office Hours: By appointment

Jill Falman, MS, MPA
Research Scientist, Department of Environmental and Occupational Health Sciences and Director, Institute for Risk Analysis and Risk Communication (IRARC)
Phone: 206-616-7376
E-mail: falman@uw.edu

Course Times and Locations:

Day/Time: Monday, 2:30 pm - 4:20 pm
Location: 4225 Roosevelt Way NE in Roosevelt 212

Course Description:

This journal club is designed as a hands-on learning experience to understand both the fundamental concepts of risk perception and risk communication and the relationships in this dynamic paradigm. Learn how to develop a foundation of tools and methods to address the different levels of certainty and messaging inherent in risk assessment. Create risk communication messages under different levels of knowledge and urgency with conditions of well-recognized information as well as emerging risk information. Students and instructor case-studies will be utilized.

Autumn 2019 Learning Objectives:

- Assess how perception is impacting our understanding in risk assessments.
- Learn how scientific uncertainty can be handled in risk communication.
- Discuss and evaluate how example current events have been handled by policy makers and communicated with the public.
- Identify and use three types of risk communication.
- Apply understanding of perception and communication to case studies.
Additional Generic Learning Objectives:
1. Think critically about risk assessment by completing reading assignments and participating in class discussions.
2. Communicate the concept of integrated risk assessment and risk communication.
3. Explain the risk assessment framework as it relates specifically to the current quarter topic.
4. Analyze assigned readings and interpret their relevance to not only the quarter topic but also their applicability and generalizability to risk assessment topics at large.
5. Summarize key points from assigned journal articles or other required readings.
6. Prepare and deliver an oral presentation(s) discussing the required reading.
7. Critique risk assessment applications as they relate to the current quarter topic.
8. Identify risk assessment strengths and challenges, as well as the role of uncertainty.
9. Develop skills to think critically about the methods and tools used for assessment, management, and communication of risk.

Course Requirements
Reminder this class is a journal club so please come to each session prepared to share your articles or sections with your colleagues. Please use the “Article Report Form Template” to structure your review. Please feel free to share a few slides that share these highlights in a manner you wish to share. We will always be able to pull up the original article but sometimes your tailored slides facilitate the discussion.

You will be requested to review two articles for each class and to complete 5 of the article report forms. If you will be missing class, please send your review by email.

You will also, by the end of the class, be requested to complete one “Research Relevancy Report Form Template”. Note that this report can cover more than one article and be more of a summary of lessons learned from the sessions. Total page limits for this assignment is 3 pages double spaced. We will discuss further in class the purpose and intent of this report.

Grading:
- **50% Weekly Discussion Participation and Related Assignments:** Weekly summations and presentation of key points from readings and respectful engagement in substantive in-class discussions.
- **25% FIVE Article Reports** - See the template at the end of the syllabus and limit your responses to 2 pages double spaced. Reports will be graded for completeness and thoughtfulness. Reports should be submitted each week before class starts. You will need to submit five Article Reports throughout the quarter.
- **25% In-Class Presentation and report** - Presentation or demonstration of the applications to your own research or interest area. Please use the Research Relevancy
ENV H 593 Syllabus, Autumn Quarter 2019

Report Template at the end of this syllabus and limit your response to 3 pages double spaced. You will be required to submit ONE research relevancy report for the quarter. In addition to the report, please prepare a brief presentation (about 10 minutes) with 2-3 figures/tables to support your observations.

Academic Integrity Statement:
Students at the University of Washington (UW) are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university's policies on cheating and plagiarism, and the SPH Academic Integrity Policy. Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington Community Standards and Student Conduct website.

Access and Accommodations:
Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course. If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

Multi-cultural Inclusion Commitment from Environmental Health:
The UW School of Public Health seeks to ensure all students are fully included in each course. We strive to create an environment that reflects community and mutual caring. We encourage students with concerns about classroom climate to talk to your instructor, your advisor, a member of the departmental or SPH Diversity Committee and/or the program director. DCinfo@uw.edu is a resource for students with classroom climate concerns.

We have the privilege of learning together and we have a responsibility to engage in dialogue in a way that supports learning for all of us. Many of the issues we will discuss in this course may
concern issues of disproportionate risks, sensitivities, and impacts due to age, gender, race, and/or social inequalities. This is what public health hopes to address, however we know that these can be difficult topics to address, hence we thus feel it is even more important to be sensitive to our colleagues’ experiences and ideas. Here are some practices we as learning community members can strive to use in our learning process:

- My own viewpoint is important—share it. It will enrich others.
- My students and colleagues’ viewpoints are important—listen to them. Do not judge them.
- Extend the same listening respect to others I would wish them to extend to me. We all have room to grow to become better listeners in non-judgmental ways.
- Recognize that I might miss things others see and see things others might miss.
- Raise my views in such a way that I encourage others to raise theirs.
- Inquire into others’ views while inviting them to inquire into mine.
- Ask questions when I don’t understand something.
- Surface my feelings in such a way that we make it easier for others to surface theirs.
- Test my assumptions about how and why people say or do things.
- Challenge what was said or done, rather than make assumptions about the individual.
- Beware of either-or thinking.
- Be willing to take risks in moving outside my comfort zones.
- Affirm others

**Land Acknowledgment:**
Washington State is home to 29 federally recognized and 5 unrecognized tribes. The University of Washington acknowledges the Coast Salish people of this land, the land that touches the shared waters of all tribes and bands within the Duwamish, Suquamish, Tulalip and Muckleshoot nations.

**Diversity Statement:**
Diverse backgrounds, embodiments and experiences are essential to the critical thinking endeavor at the heart of University education. In SPH, students are expected:

- To respect individual differences, which may include, but are not limited to, age, cultural background, disability, ethnicity, family status, gender, immigration status, national origin, race, religion, sex, sexual orientation, socioeconomic status and veteran status.
- To engage respectfully in the discussion of diverse worldviews and ideologies embedded in course readings, presentations and artifacts, including those course materials that are at odds with personal beliefs and values.
- To encourage students with concerns about classroom climate to talk to their instructor, adviser, a member of the departmental or SPH EDI Committee, the Assistant Dean for EDI, or the program’s director.
Religious Accommodations:
Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW’s policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy (https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/).
Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodations-request/).

Bias Concerns:
The Office of the Dean has a student concern policy, a faculty concern policy and standard HR procedures for staff concerns. Our 2018 climate survey states that most people in SPH do not report bias incidents because they do not know where to go. Students are encouraged to report any incidents of bias to someone they feel comfortable with, including instructors, advisers or department staff. They can email dcinfo@uw.edu for immediate follow up. Bias concerns can be anonymously and confidentially reported at this link: https://sph.washington.edu/about/diversity/bias-concerns.
Data is collected by the Assistant Dean for EDI and the Director of Program Operations for Student and Academic Services and tracked for resolution and areas are identified for further training.

Pronouns:
According to the UW First Year Programs, being an ally is not just about intention, it’s also about behavior. We share our pronouns because we strive to cultivate an inclusive environment where people of all genders feel safe and respected. We cannot assume we know someone’s gender just by looking at them. So we invite everyone to share their pronouns.
## Course Schedule:
Monday, 2:30 pm - 4:20 pm at 4225 Roosevelt Way NE in Roosevelt 212

<table>
<thead>
<tr>
<th>Session #</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>09/30/19</td>
<td>Risk Communication and Perception Introduction to Class</td>
<td>No Required Readings</td>
</tr>
<tr>
<td>Session 2</td>
<td>10/07/19</td>
<td>Practical Lessons</td>
<td></td>
</tr>
<tr>
<td>Session 3</td>
<td>10/14/19</td>
<td>Guest Lecture (Bruce Duncan)</td>
<td>Session 3 References</td>
</tr>
<tr>
<td>Session 4</td>
<td>10/21/19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 5</td>
<td>10/28/19</td>
<td>(Elaine at PhenX Meeting)</td>
<td>Session 5 References</td>
</tr>
<tr>
<td>Session 6</td>
<td>11/04/19</td>
<td>(Elaine at WDS-SC Meeting) Case Studies of the DOH</td>
<td>Session 6 References</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jill Falman</td>
</tr>
<tr>
<td></td>
<td>11/11/19</td>
<td>Veteran’s Day – No Class</td>
<td></td>
</tr>
<tr>
<td>Session 7</td>
<td>11/18/19</td>
<td>Class Topics High Impact, Uncertainty about Risk, Decision analytics, Nanotechnology</td>
<td>Session 7 References Faustman</td>
</tr>
<tr>
<td>Session 8</td>
<td>11/25/19</td>
<td>Climate Change (Ann Bostrom and Kate Crosman)</td>
<td>Session 8 References Faustman</td>
</tr>
<tr>
<td>Session 9</td>
<td>12/02/19</td>
<td>Class Topics Uncertainty II Vaccination, Contaminated Breast Milk</td>
<td>Session 9 References Faustman</td>
</tr>
</tbody>
</table>
ENVH 593 Autumn 2019
Current Topics in Risk Assessment

Article Report Form Template:
*PLEASE LIMIT RESPONSES TO 2 PAGES DOUBLE SPACED

Date:
Reviewer Name:
Title, Authors, and Date of Paper:

- What was the message of this article/communication?
- What communication methods did the author use? (E.g. quantitative, qualitative, risk comparison, etc.)
- What was the author trying to say?
- Who was the intended audience?
- What are three common examples from this paper/communication you want to share (good and/or bad)?

Research Relevancy Report Form Template:
*PLEASE LIMIT RESPONSES TO 3 PAGES DOUBLE SPACED

Date:
Reviewer Name:

- What is the topic area of your research?
- What three messages would you like to convey about your research?
- Identify the intended audience for each of these three messages.
- What techniques did you learn from this course that you think are especially useful?
- Identify one appropriate risk comparison to use to convey at least one of your messages.
- Diagram one of your messages using a message box.
Study Case Topics

Breast Milk:


Cigarettes and Vapes

2. Erin Sutfin. Effective Risk Communication on New and Emerging Tobacco. FDA.

Climate Change
2. Crosman KM, Bostrom A, Hayes AL.
England Nerve Agent Attack

1. BBC News. Salisbury Novichok public health response 'put lives at risk'.
2. The Verge. 2019. The nerve agent poisoning in England was a message to the rest of the world.

Glyphosate

   https://doi.org/10.5271/sjweh.3851

Marine Litter


Nanotechnology


Pesticides & ALAR


Radiation – Fukushima


Radiation – Russia


Risk Communication and Perception


Harvard Case Studies:

1. Fish: Here's the Catch

2. Veracity Worldwide: Evaluating FCPA-Related Risks in West Africa

3. County Department of Public Health: Organizing for Emergency Preparedness and Response
   Communication, Infrastructure, Entrepreneurship, Innovation, Leadership,
Change management, Organizational development, Strategic planning, Enterprise systems, Emergencies

4. Fears and Realities: Managing Ebola in Dallas
Crisis management, Health care, Public health, Local government, State government, Contingency planning, Business & government relations

5. SARS Outbreak in Toronto
Crisis communication, Health

6. CVS Health: Promoting Drug Adherence
Communication, Communication strategy, Public relations, Goals, Insurance, Retail, Decision making, Social issues, Incentives, Motivation, Marketing, Marketing communications, Consumer behavior, Marketing strategy, Information technology, Service management, Value chains, Health, Value creation, Metrics

Communication strategy, Public relations, AIDS, Social enterprise, Advertising campaigns, Advertising strategy, Marketing strategy, Marketing implementation, Health

8. Maternal and Child Health in Uttar Pradesh, India: A Mother's Story
Communication, Behavioral economics, Organizational perspectives, Public health, Resources, Health care delivery, Decision making, Government policy, Human behavior, Families & family life, Consumer behavior, Consumer marketing, Consumers, Health

9. Mary Selecky and Washington State's Response to the Fukushima Daiichi Nuclear Disaster
Communication, Crisis communication, Public health, Government policy, Environmental regulations, Product safety, Business & government relations
10. Catalytic Defiance as a Crisis Communication Strategy: The Risk of Pursuing Long-Term Objectives
   Communication strategy, Crisis communication, Public relations, Crisis prevention, Catalytic mechanisms, Strategy

11. Surviving the Surge: New York City Hospitals Respond to Superstorm Sandy
   Crisis management, Health care, Public health, Local government, State government, Leadership, Resilience, Business & government relations

12. Lawnsite.com vs. DuPont (A): The Game Changer
   Crisis communication, Online media, Environmental protection, Corporate governance, Investors, Stakeholders

13. Exxon Corp.: Trouble at Valdez
   Communication strategy, Crisis management, Public relations, Environmental responsibility, Energy, Environmental protection, Business ethics, Social responsibility
   https://hbsp.harvard.edu/product/390024-PDF-ENG?Ntt=environmental+communication&itemFindingMethod=Search
<table>
<thead>
<tr>
<th>SESSION 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SESSION 2</td>
</tr>
<tr>
<td>SESSION 3</td>
</tr>
<tr>
<td>SESSION 4</td>
</tr>
<tr>
<td>SESSION 5</td>
</tr>
<tr>
<td>SESSION 6</td>
</tr>
<tr>
<td>SESSION 7</td>
</tr>
<tr>
<td>SESSION 8</td>
</tr>
<tr>
<td>SESSION 9</td>
</tr>
</tbody>
</table>