SYLLABUS

EPID/MHCH/HBEH 625 / 626 / 627
“Injury as a Public Health Problem”

FALL 2017

Credits per module: 1
Total possible credits (for 625 + 626 + 627) = 3

Tuesdays and Thursdays 12:30 – 1:45 PM
McGavran-Greenberg 2304

Faculty: Yvonne Golightly, PT, MS, PhD; golight@email.unc.edu
Meghan Shanahan, PhD; shanahan@unc.edu
Steve Marshall, PhD; smarshall@unc.edu
Beth Moracco, PhD; moracco@email.unc.edu
Office Hours: By Appointment

Course Overview. This course covers the causes and consequences of injury through the use of interactive classroom exercises and seminars led by experts in injury. Concepts taught in this course are valuable for injury control efforts and can be translated to non-injury settings. These concepts include risk communication, framing of messages to a given audience, evaluation of policies, and community-based capacity building.

Learning Objectives and ASPH Competencies. The course is designed to assist students in achieving the core competencies developed by the Association of Schools of Public Health (ASPH). After completing the course, students should be able to:

- Discuss, apply, and interpret basic epidemiologic concepts and measures for describing injury occurrence in populations.
- Identify key sources of data for studying injuries.
- Draw appropriate inferences from data on injuries.
- Identify basic theories, concepts and models for injury research and interventions.
- Identify factors that affect injury in individuals and populations.
- Identify stakeholders for the planning, implementation and evaluation of programs, policies and interventions for injury.
- Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions for injury.
- Describe the role of social and community factors in preventing injuries.
- Specify multiple targets and levels of intervention for programs and/or policies for injury prevention.
• Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data related to injuries.
• Communicate epidemiologic information related to injury to lay and professional audiences.

Requirements. This course provides an introduction to a range of injury topics and fundamental concepts. Topics, readings, and speakers for each class session have been specifically selected to address key injury concepts. Students are expected to engage with the course ideas and be prepared to participate in class discussions and activities.

Attendance. Students are expected to attend class on time and to stay until the end. Please inform the instructors in advance if you know that you will be absent or late for a class.

Phones, laptops, tablets. Please turn cell phones to silent/vibrate while in class. Laptops may be used in class only for taking notes and for looking up information relevant to the topic being discussed. Social media and games should not be accessed during class.

Readings will be available through Sakai.

Grading and Class Rubric. The final grade for Module 1 will be assigned as follows:

<table>
<thead>
<tr>
<th>% OF GRADE</th>
<th>Graded Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>Class Participation</td>
</tr>
<tr>
<td>75%</td>
<td>Class Assignment</td>
</tr>
</tbody>
</table>

Class Participation. This portion of the grade reflects the following elements: 1) preparation for class, including doing the required readings before coming to class, as demonstrated by knowledge base exhibited during class discussions; 2) engagement in class discussion, as demonstrated by quality of comments and honesty in sharing your opinions and thoughts.

Class Assignment. The assignment is a presentation on an injury policy topic. During the last two sessions of Module 1, each student will make a presentation on an injury prevention topic of his/her choosing. Your presentation should be focused and make the case for specific action or policy change on an injury/violence topic (i.e. have an “ask”). The course instructors will act as mock policy-makers, i.e., they will role-play the policy-makers that you are trying to influence. They will ask you questions at the conclusion of the presentation. You should allow 5 minutes for presentation and 5 minutes for interaction with the mock policy-makers.

Recall that policy is present at multiple levels in society: institutional (e.g. a single healthcare facility, or a single public library), town/city, county, organizational (e.g. all healthcare facilities operated by UNC Healthcare), state, national, or global. Policy-
makers exist at all these levels. You should identify your target policy-makers well in advance and your presentation should be tailored to that audience. You should be very clear about your policy “ask”.

Students who wish to be considered for a grade of an “H” should prepare “supporting materials” for their policy presentation. “Supporting materials” should reflect the scientific basis for the requested policy change. These could be your detailed notes with citations, a “white paper” with recommendations and bibliography, or a one-page summary sheet with citations prepared in a format suitable for informed readers such as a congressional staffer. These supporting materials must be handed in at the time of the presentation. Needless to say, this should be your original work, with appropriate citations and references as needed. Note that providing this additional material does NOT guarantee an H, it only guarantees consideration for an H.

Think of your presentation as the “pitch” – it’s the 5 minutes you get with a leading policymaker (be they a scout master or the President of the United States). The "supporting documentation" is the material that you “leave-behind”: you hand to his/her staff so that they can craft a policy recommendation.

The grading rubric for the presentations will be:

- Clearly identified the role of the presenter (who are you?) and the audience (board, state legislator, president of a homeowners’ association, president of the USA, etc) [5 pts]
- Clearly articulated the general problem area of interest (child pedestrians, partner violence, youth assault) [5 pts]
- Presentation was clear, well-structured, concise, related to the general problem, used social math, used positive images [5 pts]
- Clearly identified a concrete and specific request of the audience (the “Ask”) [5 pts]
- Presentation supported the Ask and invoked the logic of the audience [5 pts]

**DUE DATES:**

- **Sept 14:** Declare your probable policy target and audience. A sign-up will be circulated in class on that date (or we may use Sakai drop box)
- **Sept 26 and 28:** Presentations. Allow up to 5 minutes for presentation and up to 5 minutes for interaction with the mock policy-makers. Hand in your supporting materials in class at the end of your presentation if you wish to considered for an H grade.
Session 1: August 22 – Fundamentals of Injury Prevention (Part I)
INSTRUCTOR: Yvonne Golightly

Learning Objectives:
- Define injury
- Distinguish between an unintentional injury and an intentional injury
- Describe the adaption of the public health model and public health concepts to injury prevention and control
- Identify the agent of injury for various injury events

Plan:
- Introductions
- Syllabus, Learning Paradigms, Schedule
- While We Were Sleeping by David Hemenway
- Lecture: Injury definition, public health model, agent of injury, simple prevention concepts
- Energy is the Agent of Injury (whole group)

Session 2: August 24 – Fundamentals of Injury Prevention (Part 2)
INSTRUCTOR: Meghan Shanahan

Learning Objectives:
- Discuss the magnitude of the injury problem in the US
- Understand the concept of the injury pyramid
- Apply the Haddon Matrix and Haddon Countermeasures
- Explain why one should not use the word “accident” to describe injuries
- Recognize prevention concepts, including active/passive prevention strategies

Plan:
- Discuss readings
- Lecture: Magnitude of injury problem, injury pyramid, Haddon Matrix, Haddon Countermeasures, more prevention concepts
- Examples of Passive and Active Strategies (whole group, based on “While We Were Sleeping” pages 30-34)
- Create a Haddon Matrix, noting Passive vs. Active Strategies (small group + report back, based on “While We Were Sleeping” pages 10-12)

Readings:
• Car Success Stories 1.1 to 1.3 in “While We Were Sleeping”, pp 10-11
• Home Success Stories 2.1, 2.3, & 2.5 in “While We Were Sleeping”, pp 30-34

Recommended Reading:
Biography of William Haddon in “While We Were Sleeping”, pages 23-25.

Session 3: August 29 – How Injury Prevention Happens (Part 1)
INSTRUCTOR: Alan Dellapenna, MPH. Branch Head, Injury and Violence Prevention Branch, NC DPH

Learning Objectives:
• Recognize effective injury/violence prevention programs
• Understand how program development can utilize:
  o Local surveillance/epidemiologic data
  o Community coalition development/involvement
  o Training on skills to address the problem identified
  o Project development to address the problem
• Identify and discuss key elements of effective programs

Plan:
• Discuss readings
• Lecture
• Group discussion

Reading:
• Sections 8.2 to 8.3 in “Models of Injury Prevention” chapter in “While We Were Sleeping”, pages 133-140

Session 4: August 31 – Framing Intervention Messages
INSTRUCTOR: Yvonne Golightly

Learning Objectives:
• Develop understanding and experience in the use of framing theory as applied to injury messaging

Plan:
• Discuss readings
• Lecture
• Discuss framing of motorcycle safety messages
• Role play framing exercises for road safety (reading: Section 9.1) and firearm violence (reading: Section 9.4)
• Review Assignment (selection of topic due 9/14)

Reading:
• Sections 9.1 & 9.4 in “Future Successes” Chapter in “While We Were Sleeping”, pages 145-151 and 158-163.
**Session 5: September 5 – Prevention through Policy**

**INSTRUCTORS:** Meghan Shanahan

**Learning Objectives:**
- Discuss how policies relate to programs
- Describe differences between active/passive strategies and programs/policies
- Identify the circumstances in which policies can be most effective
- Discuss how policy change happens
- Recognize key Module 1 topics:
  - Human behavior change in injury/violence: what motivates it?
  - How policy change occurs and program implementation happens
  - Injury messaging and framing

**Plan:**
- Discuss readings
- Lecture
- Develop policy recommendations, justify them, and present an evaluation plan on two topics: (small group + report back)
  - Suicide prevention
  - Teenage driving

**Reading:**
- Building The Golden Gate Bridge (“While We Were Sleeping” pp 51-52)
- Section 9.3 in “Future Successes” chapter in “While We Were Sleeping”, pages 155-158.
- Car Success Stories 1.4 to 1.14 in “While We Were Sleeping”, pp 12-19

**Session 6: September 7 — Designing Effective Interventions**

**INSTRUCTOR: Yvonne Golightly**

**Learning Objectives:**
- Describe the PRECEDE-PROCEED approach to developing interventions in injury/violence prevention

**Plan:**
- Lecture
- Group Discussion of lecture topic and readings

**Reading:**

Session 7: September 12 – Trauma Care
INSTRUCTOR: Anthony Charles, MD. Associate Professor, Department of Surgery

Learning Objectives:
- Describe the development of trauma care system
- Understand the concept of a trauma care center and the different levels of trauma care
- Apply the trauma care center concept in sub-Saharan Africa

Plan:
- Lecture
- Group Discussion of lecture topic and readings

Required Reading:
- Introduction and Sections 7.1 & 7.2 in “Chapter 7: Medical Treatment”, While We Were Sleeping, pages 111-117.

Session 8: September 14 – Injury Surveillance and Death Investigation Systems
INSTRUCTOR: Yvonne Golightly

Learning Objectives:
- Describe the role of injury surveillance on a national, regional, and local level
- Recognize the wide variety of injury surveillance systems
- Discuss strengths and weaknesses of different approaches to surveillance
- Describe the death investigation system

Plan:
- Discuss readings
- Lecture

Readings:
- Section 8.4 “Sweden” in “Models of Injury Prevention” chapter in “While We Were Sleeping”, pages 140-142
- Appendix “Scientific Injury Studies” in “While We Were Sleeping”, pages 175-177

Session 9: September 19 – Implementing Effective Interventions
INSTRUCTOR: Meghan Shanahan

Learning Objectives:
- Describe how behavioral and social science theories and models can be used to implement interventions in injury/violence prevention
• Apply behavioral and social science concepts to injury/violence prevention
• Recognize the components of the RE-AIM framework

Plan:
• Discuss reading
• Lecture
• Critique PSA videos (large group)
  o Road Safety (Sussex Safer Roads): https://www.youtube.com/watch?v=h-8PBx7isoM
  o Road Safety (NC; Purdue and Grave Digger) https://www.youtube.com/watch?v=JKh9KB2yFzA&index=32&list=PL6316978F8E69C834 https://www.youtube.com/watch?v=nFG5Xox_dSs&list=PL6316978F8E69C834&index=27
  o Dumb Ways to Die: https://www.youtube.com/channel/UC7lZ_iOz3NhA6krGflLerQA (see also http://www.metrotrains.com.au/safety/)
  o Appalachian State suicide prevention https://www.youtube.com/watch?v=K-INKJk9g-E&feature=youtube (see also https://preventsuicide.appstate.edu/)
  o Therapy suicide prevention http://mantherapy.org/

Reading:


INSTRUCTOR: Nidhi Sachdeva, MPH. Injury and Violence Prevention Branch, NC DPH

Learning Objectives:
• Describe harm reduction strategies for opioid overdose
• Understand how opioid overdose prevention programs can utilize:
  o Community level data
  o Coalition development/involvement
  o Training on skills to address opioid overdose
  o Project development to address opioid overdose

Plan:
• Lecture
• Exercise
• Group Discussion

Reading: North Carolina’s Opioid Action Plan 2017-2021

Session 11: September 26 – Class Presentations (see Class Assignment above)

Session 12: September 28 – Class Presentations (see Class Assignment above)