Population Health Sciences 802
Advanced Epidemiology: Etiology and Prevention

Lecture: Tuesdays and Thursdays 1:00 – 2:15 in WARF 758
3 credits

Fall 2007 Syllabus

Course goals

The primary goals for this course are to:

1. Understand the burden of several important diseases and their major risk factors as well as promising areas for disease prevention
2. Summarize the health literature relevant to specific health conditions so that priorities for research goals can be identified
3. Foster the skills necessary for designing epidemiologic studies to improve our understanding of disease etiology, prevent negative health events, and promote health
4. Practice techniques for writing effective grant applications incorporating epidemiologic methods

Instructor contact information

Instructor: Amy Trentham-Dietz, PhD
Assistant Professor, Department of Population Health Sciences
610 Walnut St., WARF room 701
tel: 3-1946, 5-4175
trentham@wisc.edu
Office hours: by appointment

I will use email and the course website to communicate with students throughout the semester. Please check your email and the website regularly. I will read email messages from students daily, Monday-Friday. No promises about weekends or when I am out of town.

Grading

4% Participation
10% Assignment 1 (literature review, due Sep 18)
10% Assignment 2 (mini-proposal, due Sep 27)
15% Assignment 3 (article critique, due Oct 9)
61% Major project
   1% project topic (due Sep 20)
   20% part 1: literature review and presentation (due Oct 23)
   30% part 2: grant proposal (due Nov 29)
   10% part 3: critique and mock study section (due Dec 4)
100% Total
Grades will be assigned as: A 93.0-100; AB 87.0-92.9; B 80.0-86.9; BC/C/etc <80. I reserve the option to lower the grade cut-off points, however I will not raise the cut-offs.

A portion of the course grade (4%) will be based on participation in class. To encourage students to ask questions and contribute comments to the discussion throughout the semester, points will be given according to whether the student rarely contributes (0%), occasionally contributes (2%) or regularly contributes (4%) to class discussions.

Students must make every effort to notify me within the first two weeks of class of the specific dates on which you may need to miss class for religious observances.

Homework assignments and projects that are completed late will have a decreased possible maximum score by 1% for each day late. For example, if a perfectly completed Assignment 1 is handed in 2 days late, then it could receive a maximum score of 8 out of 10 percentage points of the total course grade.

**Collaborative environment**

I will assume that your assignments are representative of your own work. Individual written assignments must be in your own words and should not be identical to another student’s work. Statements of fact should be accompanied by a published reference; statements without references are assumed to be your own conclusions. Please refer to the Dean of Students Office (75 Bascom Hall) or this website if you have questions about student misconduct:

http://www.wisc.edu/students/saja/misconduct/misconduct.html

I encourage students to discuss course material and content with each other, although if you seek to “claim credit for the work or efforts of another without authorization or citation”, this will fall under misconduct as defined by chapter 14 of the University of Wisconsin System Administrative code.

The UW–Madison is committed to creating a dynamic, diverse and welcoming learning environment for all students and has a non-discrimination policy that reflects this philosophy. Disrespectful behaviors or comments addressed towards any group or individual, regardless of age, race/ethnicity, sexuality, gender, religion, ability, or any other difference is deemed unacceptable in this course, and will be addressed publicly by the professor.

**Learn@UW (aka D2L, Desire2Learn)**

Course information, required readings and other helpful materials will be distributed on the course website at http://learnuw.wisc.edu

All students are expected to routinely log into the course site. The course site will contain the updated syllabus as well as other critical course information. I’ve done my best to make the on-line sites as helpful as possible, but they are constantly under
development as I add function and content. If you notice inconsistencies or misspellings, if you have trouble accessing anything, or if you would like to propose improvements, please email me (trentham@wisc.edu).

### 2007 Lecture Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
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<th>Lecture Topic</th>
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<tbody>
<tr>
<td>Sep 4</td>
<td>Introduction</td>
<td>Sep 6</td>
<td>The epidemiologic perspective</td>
</tr>
<tr>
<td>Sep 11</td>
<td>Introduction to cancer Assignment 1 distributed</td>
<td>Sep 13</td>
<td>Literature reviews</td>
</tr>
<tr>
<td>Sep 18</td>
<td>Assignment 1 (literature review) discussed</td>
<td>Sep 20</td>
<td>Breast cancer. Project topic due. Assignment 2 distributed</td>
</tr>
<tr>
<td>Sep 25</td>
<td>Colorectal cancer</td>
<td>Sep 27</td>
<td>Assignment 2 (mini-proposal) discussed. Assignment 3 distributed</td>
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<tr>
<td>Oct 16</td>
<td>Guest: Maureen Durkin. Newborn screening.</td>
<td>Oct 18</td>
<td>Grant writing/study conduct part 2. (office hours)</td>
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<tr>
<td>Oct 23</td>
<td>Student presentations. Major project literature review due</td>
<td>Oct 25</td>
<td>Student presentations.</td>
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<tr>
<td>Oct 30</td>
<td>Student presentations.</td>
<td>Nov 1</td>
<td>Guest: Tamara LeCaire. Type 1 diabetes.</td>
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<tr>
<td>Nov 27</td>
<td>Guest: Erika Hagen. Asthma</td>
<td>Nov 29</td>
<td>NIH grant review process. Major project part 2 due</td>
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<tr>
<td>Dec 4</td>
<td>Mock study section. Major project part 3 due.</td>
<td>Dec 6</td>
<td>Mock study section</td>
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<tr>
<td>Dec 11</td>
<td>Mock study section</td>
<td>Dec 13</td>
<td>Revising and resubmitting applications</td>
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### Important Due Dates

- Sep 18 Assignment 1
- Sep 20 Project topic
- Sep 27 Assignment 2
- Oct 9 Assignment 3
- Oct 23 Major project part 1: literature review and presentation
- Nov 13/15 Office hours to review progress on major project
- Nov 29 Major project part 2: grant proposal
- Dec 4 Major project part 3: critique
Readings

No textbooks are required reading for this course. Required and recommended readings, mostly journal articles and book chapters, will be available on the course website. Please check the course website routinely for these materials.

Useful Websites

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<thead>
<tr>
<th>Website Title</th>
<th>Site</th>
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<tbody>
<tr>
<td>UW Department of Population Health Sciences</td>
<td><a href="http://www.pophealth.wisc.edu/">http://www.pophealth.wisc.edu/</a></td>
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<tr>
<td>Health Sciences Library</td>
<td><a href="http://www.hsl.wisc.edu/">http://www.hsl.wisc.edu/</a></td>
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<tr>
<td>National Center for Health Statistics (NCHS)</td>
<td><a href="http://www.cdc.gov/nchs/">http://www.cdc.gov/nchs/</a></td>
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<tr>
<td>World Health Organization (WHO)</td>
<td><a href="http://www.who.int/en/">http://www.who.int/en/</a></td>
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<tr>
<td>Wisconsin Department of Health and Family Services (DHFS)</td>
<td><a href="http://www.dhfs.state.wi.us/">http://www.dhfs.state.wi.us/</a></td>
</tr>
<tr>
<td>The WWW Virtual Library</td>
<td>Epidemiology: <a href="http://www.epibiostat.ucsf.edu/epidem/epidem.html">http://www.epibiostat.ucsf.edu/epidem/epidem.html</a></td>
</tr>
<tr>
<td>The Centers for Disease Control (CDC)</td>
<td><a href="http://www.cdc.gov">www.cdc.gov</a></td>
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<tr>
<td>Surveillance, Epidemiology, and End Results (SEER) Program</td>
<td><a href="http://seer.cancer.gov/">http://seer.cancer.gov/</a></td>
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Other Resources

Dr. Ronald LaPorte and colleagues at the University of Pittsburgh manage the Supercourse project, an on-line collection of over 2,200 self-study “lectures” on various topics in epidemiology. Lectures have been contributed by faculty all over the globe: http://www.pitt.edu/~super1/

Other books that are traditionally used as textbooks in epidemiology courses are listed below. These may supplement your reading to learn more about a particular subject:

- Szklo M and Nieto FJ. Epidemiology: Beyond the Basics, 2nd ed. Jones and Bartlett, 2007