EVE 486

Public Health
Fall Semester 2005
M, W
11 – 11:50
Room EGC 110

Instructor: Andre’ Butler, Assistant Professor
Environmental and Mechanical Engineering
Office: Suite 101G, School of Engineering
Availability: By appointment (very flexible)
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Supplemental
ISBN: 0-674-01494-4. ($56.11 at amazon.com; $58.50 at Barnes&Noble)

Yassi, Annalee; Kjellstrom, Tord; de Kok, Theo; and Guidotti, Tee L. *Basic Environmental Health*, Oxford Univ. Press, 2001.
ISBN: 0-19-513558-X. ($46.80 at amazon; $52 at Barnes&Noble)

ISBN: 0-534-51717-X. ($56 at amazon; $58.95 at Barnes&Noble)

Catalog Description:
Public health engineering principles for protection against biological and chemical hazards. Emphasis on major communicable diseases that plague mankind, organisms that cause them, routes of transmission, and engineering methods of control. Appropriate control methods for rural areas and developing countries.

Course Objectives:
Upon successful completion of this course, students will be able to
1. Discuss in detail the issues relevant to local and global environmental health.
2. Apply toxicological and epidemiologic data to air, water, and soil environments.
3. Analyze and critique environmental health research papers and case studies.

Outcomes will be measured and assessed by grades earned for homework, exams, research paper critiques and discussion. In addition, primary instructor evaluation and student feedback on the perceived quality of the course will be used to make future improvements.

Prerequisites: (and/or corequisites)
EGR 252, EVE 405, EVE 420, EVE 402 (corequisite).
Course Content:
1. Introductory concepts; Scope (1-2 weeks)
2. Toxicology (1-2 weeks)
3. Epidemiology (1-2 weeks)
4. Indoor and outdoor air quality (1-2 weeks)
5. Drinking water issues (1-2 weeks)
6. Solid and liquid waste issues (1-2 weeks)
7. Risk assessment (1-2 weeks)
8. Miscellaneous issues (time permitting)

Grading:
The final grade will be determined as follows:

- Homework 20%
- Exam#1 25%
- Exam#2 25%
- Final Exam 30% Friday, 12/12/05 (9 – 12:00 Noon)

Homework: Homework is an important component of the class and will be distributed regularly. Collaboration is acceptable, but each student must submit an individual assignment. Late homework assignments will not be graded.

Class Participation: Students are expected to attend class and actively participate during discussions.

Class Standards
1. Please turn off cell phones and pagers before entering the classroom.
2. The honor code provisions as outlined in the Bulletin and in the student handbook, The Lair, will be assumed for everyone. Plagiarism is a violation of the honor code and is prohibited.
3. This syllabus is subject to change.

Important Additional Information:
Students with a documented disability should inform the instructor at the close of the first class meeting. The instructor will refer you to the office of Student Support Services (SSS) for consultation regarding evaluation, documentation of your disability, and recommendations for accommodation, if needed. Students will receive from SSS the Faculty Accommodation Form. On this form SSS will identify reasonable accommodations for this class. The form must be given to the course instructor for signature and then returned to SSS.

To take full advantage of disability services, it is recommended that students contact the Office of Student Support Services, immediately. The office is located on the third floor of the Connell Student Center.

Notes:
We may have up to three guest lectures on the following topics: Ambient air quality, Indoor Air Quality, and Risk Assessment.