ENRH 431: Environmental Sampling and Analysis
Autumn 2014
3 Credits, SLN 14303

Instructors Contact Information
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Department of Environmental and Occupational Health Sciences

Course web site: canvas

Teaching assistant:
Joemy Ramsey: joemyr@uw.edu
Office Hours: TBA

Course Schedule  M-W, 1:30-2:50; HSB T473

NOTE: Field trips to local sites will extend beyond normal class hours on three
Wednesdays. These trips are tentatively scheduled for October 16, November 5, and
November 18, though dates may change dependent upon availability of the hosting
laboratories. Students are required to attend at least two of the field trips to pass the
course; attendance at all 3 field trips is needed to achieve a perfect grade in this course.

Course Description
This course introduces students to the basic principles of environmental sampling and analysis to
prevent or reduce public health hazards. This is the first course in a three-course series. We will
examine sampling and analytical methods used to measure contaminants in the workplace and in
community environments. Topics include regulatory mandates, sampling design, sampling
strategies, exposure pathways and routes, quality assurance procedures applied to air, water and
soil samples. The course will be of use to environmental scientists and engineers, public health
professionals, and others interested in the field of environmental health sciences.

Learning Objectives: At the end of this course, students will be able to:
- Define the basic principles of environmental sampling and analysis
- Explain the primary laws and regulations that mandate environmental sampling and analysis
- Outline a sampling program appropriate for a particular environmental health concern
- Evaluate the quality assurance and quality control aspects of a sampling program
- Conduct basic calculations needed for planning a sampling program
- Demonstrate specific knowledge related to air, water and soil sampling principles and
techniques
- Apply critical thinking to current issues in environmental sampling

Course Format: Classes will be a combination of lecture, field visits, and discussion.
**Readings:** Readings for each course session will be posted on the course website as pdf documents.

**Assignments and Examinations**
- 10% participation
- 30% homework problem sets and written assignments
- 25% mid-term examination
- 35% final examination

**Students with Disabilities**
Disability Resources for Students (DRS) offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. If you have not yet established services through DRS, but have a temporary or permanent disability that requires accommodations (this can 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