ENSP 101: Introduction to Environmental Science and Policy
Fall 2012
MWF 1-1:50pm, Andrews Hall 101

Professors: Mark Buntaine (mbuntaine@wm.edu) and Doug DeBerry (dadeberry@wm.edu)
Buntaine Office Hours: Monday 5-8pm (Morton 13; online sign-up)
DeBerry Office Hours: Wednesday and Friday 9:30-noon (Millington 114)

This team-taught interdisciplinary course brings together perspectives and approaches to environmental problems from the natural sciences and social sciences. We examine key environmental concepts by exploring in depth six major environmental issues: environmental policy-making, fisheries, pollution, aquatic resources, climate change, and species conservation. Each issue will be analyzed from a scientific, policy, and ethical standpoint and the local and global aspects of the problems will be identified. Case studies and in-class exercises and assignments will serve as integrating tools and illuminate the interconnectedness among issues and disciplines.

Goals of the Course - by the end of the semester students will be able to:

- Examine data and explain environmental issues from a number of disciplinary perspectives as well as evaluate possible solutions.
- Use the scientific method and understand sources of scientific uncertainty about environmental problems. Use and evaluate a set of policy analysis methods.
- Identify, analyze and critique value judgements when comparing goals and outcomes in environmental issues.
- Effectively communicate complex environmental issues to a variety of audiences.

Student Evaluation

Exam #1 (10/1)	25%
Assignment #1 (10/13)	10%
Exam #2 (10/31)	25%
Assignment #2 (11/17)	10%
Final Exam (12/14)	30%

Please note the dates of these assignments, as they cannot be rescheduled or extended. We take student evaluation very seriously and do not entertain requests to re-grade assignments unless we have made a technical mistake (adding scores incorrectly) or we receive a formal, written request for a re-grade that compellingly documents a serious oversight on our part.

Attendance. We expect you to attend every class and may penalize your final grade for poor attendance.

Readings. We will assign readings for most classes and post them in Blackboard. You are expected to do all of the readings prior to class and may be called upon to talk about the readings at any time.

Communicating with the Instructors

We encourage you to talk to us about the course during office hours or by making an appointment. In addition to class time and office hours, we endeavor to be accessible to you by email, but we are not always online. In general, we will try to respond to any email that we receive within 24 hours (48 hours over the weekend). That means that you should not wait until the last minute to ask questions about assignments. In some cases, we may suggest meeting face to face to discuss issues that are difficult to address in an email. Please do not send us separate emails with the same question.

Unit 1. Preliminaries

W August 29 - Class Introduction (MB/DD)

F August 31 - Environmental footprint (DD)

M September 3 - The history of US environmentalism (MB)

W September 5 - Global environmentalism and justice (MB)

F September 7 - Categorizing environmental issues (DD)

M September 10 - Policy process (MB)

W September 12 - The commons (MB)

F September 14 - Environmental regulation in the United States (DD)

Unit 2. Fisheries

M September 17 - Movie: End of the Line (MB)

W September 19 - eFish simulation (MB)

F September 21 - Fisheries science (DD)

M September 24 - Guest lecture: environment and conflict

W September 26 - Fisheries policies (MB)

F September 28 - Spotlight on: shellfish mariculture and the environment (DD)

M October 1 - Exam #1 (MB)

Unit 3. Pollution

W October 3 - Pollution science (DD)

F October 5 - Pollution science case study (DD)

M October 8 - Pollution game (MB)

W October 10 - Pollution policies: taxes, bans, and tradeable permits (MB)

F October 12 - Noise pollution (What's the noise on noise?) (DD)

Saturday, October 13 @ 11:59pm — Assignment #1 Due

M October 15 — FALL BREAK (NO CLASS)

Unit 4. Aquatic resources

W October 17 - "Waters of the United States" (...including wetlands...) (DD)

F October 19 - The Clean Water Act and US aquatic resources regulation (DD)

M October 22 - Payments for ecosystem services (MB)

W October 24 - Chesapeake debate/simulation (MB/DD)

F October 26 - The Chesapeake Bay - what's the real story? (DD)

M October 29 - Case: the BP oil spill (MB)

W October 31 - Midterm II (DD)

Unit 5. Climate Change

F November 2 - Climate change science (DD)

M November 5 - Fossil fuel energy policy (MB)

W November 7 - Policy options to promote alternative energy (MB)

F November 9 - Technology and alternative energy: advancements in the science (DD)

M November 12 - UNFCCC process (MB)

W November 14 - International climate debate / simulation (MB/DD)

Unit 6. Biodiversity / Species conservation

F November 16 - Biodiversity science (DD)

Saturday, November 17 @ 11:59pm — Assignment #2 Due

M November 19 - Community management vs. parks (MB)

W November 21 — THANKSGIVING BREAK (NO CLASS)
F November 23 — THANKSGIVING BREAK (NO CLASS)

M November 26 - International biodiversity agreements (MB)

W November 28 - Endangered Species Act (DD)

F November 30 - Invasive Species (DD)

Unit 7. Wrapping Up

M December 3 - William & Mary sustainability efforts (Guest)

W December 5 - Careers in ENSP (DD)

F December 7 - Review for final exam (MB/DD)

Final Exam — Friday, December 14, 1-4pm