ENR 5451
Water Policy and Governance

Day and time of meetings: Monday/Wednesday from 12:45 to 2:05 PM
Location: 246 Agricultural Administration Building

Instructor: Ramiro Berardo, Ph.D.
Office hours: Monday 9 to 10:30 am and Wednesday 11:00 am to 12:00 pm, or by appointment
Email: berardo.3@osu.edu

Course Description

Freshwater is a necessary resource, but also a scarce one. It is this scarcity that produces the conditions for the emergence of conflict among potential users, hence requiring the design of institutions—or rules—that seek to accomplish an efficient and equitable utilization of water. This class examines such institutions at a variety of levels—state, federal, and international—and analyzes how they affect water access and use in different areas (agriculture, energy, etc.). Students in the class will also engage in a careful examination of the sources of conflict and cooperation among water stakeholders on a regional and global scale. The main goal of the course is to foster the students’ capacity to assess how water-related conflicts can be prevented through the design and implementation of relevant policies.

Course Objectives

- To expose students to the study of water topics from a policy perspective.
- To understand the role of national legislation in the regulation of behavior with potentially detrimental effects for water quality in the U.S.
• To learn about the potential and limitations of both free markets and governments in dealing with water management problems.
• To learn how to translate policy analysis into usable directives for water policy makers and stakeholders.
• To develop writing presentation skills.

Course Requirements

The Student:

Each student must accept responsibility for preparing for each class session by completing assigned readings and taking the time to reflect upon them. Assigned readings are posted in the course’s Carmen site (or linked to from this syllabus).

Participation is graded in this class! Each student’s contribution is helpful to increase our understanding of the topics we’ll cover. Only rule: be courteous and tolerant with ideas that you don’t agree with. In the course’s Carmen site you can find a file called “Discussion questions.pdf” at the top of the “Readings” module. This file has some basic questions you should keep in mind as you read the material before coming to class. I plan to use those questions to guide the in-class discussions (at least initially but not always). There might be as many as 30 students in this class, which means that time to participate may be at a premium if a small group of students monopolizes discussions. To prevent this problem, I will both encourage students to participate, and randomly ask students for their opinions and ideas on the readings/ongoing conversations (i.e. we’ll use the Socratic method). So be ready to be called on! But here is one simple rule to keep in mind: the more you raise your hand to participate, the less I will have to call out your name out of the blue.

Attendance is not mandatory, EXCEPT WHEN GUEST SPEAKERS ARE SCHEDULED. There are 6 guest speakers during the semester, and you can miss only one of those talks. Missing two or more talks will result in a penalty of 5% of the final grade.

There will be one midterm examination, but no final exam. The exam will be a mix of multiple choice, true/false and essay questions (there will be a few questions tailored specifically for graduate students). Make-up exams will be scheduled ONLY FOR MEDICAL REASONS THAT CAN BE PROPERLY DOCUMENTED.

Because this class is a 5000 level class, there will be both undergraduate and graduate students enrolled. Undergraduate students will work in a group final project. This final project will result in two products: a policy brief, and a video examining a water policy topic or problem. The Policy Brief-Video Combo will be presented to the rest of the class at the end of the semester (see schedule below).
More information about both components of the combo will be available online. Students will need to inform the instructor about the topic no later than January 30th. **Graduate students can choose to work individually or in groups of no more than 3 students.** Graduate students working individually will produce a Policy Brief-Poster combo. Graduate students working in a group will produce a Policy Brief-Video Combo OR a Policy Brief-Research Paper Combo. The combos will be presented to the rest of the class at the end of the semester (see schedule below). More information about the combos will be available online. Students will need to inform the instructor about the type of combo (and topic) that they will be working on no later than January 30th.

In addition to presenting the combos to the class, students will submit them for grading on April 30th no later than 1:45 pm. Late submissions will be assessed a 20% grade reduction for the first 24 hours and 10% grade reduction for every 24 hours after that.

**NO EXTRA CREDIT ASSIGNMENTS WILL BE GIVEN DURING THE SEMESTER.**

**Grading Policy**

**Participation:** 20% of the final grade.  

**Exam:** 30% of the final grade.  

**Policy Brief-Video/research paper/poster combo:** 50% of the final grade.

**Grading Scale**

A: 93 % or higher; A-: 90 to 92.9 %; B+: 87 to 89.9 %; B: 83 to 86.9 %; B-: 80 to 82.9 %; C+: 77 to 79.9 %; C: 73 to 76.9 %; C-: 70 to 72.9 %; D+: 67 to 69.9 %; D: 60 to 66.9 %; E: lower than 60%.

**University Policies**

**Availability of Accommodations.** If you have a documented disability, please register with the Office for Disability Services (ODS). After registration, make arrangements with me as soon as possible so that they can be implemented in a timely fashion. All discussions will remain confidential. If you have any questions about this process please contact ODS at (614) 292-3307.

**Academic misconduct.** Cheating on exams or plagiarism are violations of the
academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University. In addition to consulting the procedures created by the OSU Committee on Academic Misconduct (http://oaa.osu.edu/coam.html), here are some basic guidelines:

1. **Cheating on an exam:** Students who cheat on an exam will be reported to the Committee of Academic Misconduct for investigation and upon review will receive a failing grade for this class.

2. **Plagiarism:** Students who plagiarize (including engaging in self-plagiarism) will be reported to the Committee of Academic Misconduct for investigation and upon review will receive a failing grade. Plagiarism means using someone else’s ideas or words (even in a short phrase) without indicating where you got them. If you use someone else’s idea, in your own words, you must include a citation to indicate where you got the idea. If you use someone else’s words, you must put quotes around them and include a citation to indicate where they came from. Plagiarism includes copying another student’s paper or ideas. Self-plagiarism constitutes the reuse of one’s own work, in its entirety or in part, submitted to satisfy other requirements at OSU or another institution.
Course Topics

January 7th
Introduction

No required reading. We will go over the syllabus, introduce ourselves, and discuss expectations for the semester. We will also form the groups for class projects.

January 9th - 14th
Water use at a planetary scale

Required readings:


January 16th
Water Security

Required readings:


January 21st
MLK day (No class)

January 23rd
Guest Speaker: Andrea Gerlak (University of Arizona)
January 28th  
Property Rights

Required reading:


Suggested reading:


January 30th  
Guest Speaker: Raul Pacheco-Vega (CIDE-Mexico)

February 4th  
Clean Water Act

Required reading:


February 6th  
Guest speaker: Peter Bucher (Ohio Environmental Council)

February 11th  
Safe Drinking Water Act

Required readings:

Contaminate Candidate List. Visit the EPA's website for Contaminant Candidate List and familiarize yourself with the process of designing the CCL. http://water.epa.gov/scitech/drinkingwater/dws/ccl/

February 13th
Safe Drinking Water Act (II)

Required readings:


February 18th
Water Justice (I)
Guest speaker: Manny Teodoro (Texas A&M)

Required reading:


February 20th
Water Justice (II)

Required reading:


Movie: *Poisoned Water.*

Other (non required) reading:


**February 25**
Exam Review

**February 27**
Exam

**March 4**
Policy Briefs, videos, posters, and research papers.

No required reading. We will go over the requirements for policy briefs, videos, posters, and research papers. Graduate students will be required to make a decision on whether they will create a policy brief-poster combo, or write a research paper.

**March 6**
No class

**March 11-13**
Spring Break

**March 18**
Harmful Algal Blooms in Lake Erie

**Required readings:**


Other (non-required) reading:


**March 20th**

**Guest Speaker: Jeff Reutter (Ohio Sea Grant)**

**March 25th**

**Water Markets**

**Required reading:**


**In-class simulation (water rights market)**

**March 27th**

**Guest Speaker: Nicole Zacharda & Dan Gold (Great Lakes Commission)**

**Required reading:**

Erie P Market. A Framework for Water Quality Trading in the Western Lake Erie Basin

**April 1st**

**Aquatic Invasive Species in the Great Lakes**

**Required readings:**

Ohio Department of Natural Resources. (2014). State Management Plan for Aquatic Invasive Species. Columbus, OH.
April 3rd
Guest Speaker: Eugene Braig (SENR)

April 8th-10th - 15th
Work on Policy Briefs, Videos, Posters

The instructor will hold office hours during the regularly scheduled time of the week PLUS during the class allocated time these three days. Students are encouraged to stop by to talk about their projects.

April 17th
Policy Brief-Video Presentations I
(Undergraduate students)

April 22nd
Poster-Policy Brief Combo Presentations
(Graduate Students)

April 30th
Submit Combos by 1:45 pm.