

NR478 Current Topics in Environmental Science and Management

Instructor

Dr. Sarah Bisbing

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Office Location

180-506

Office Hours

M 12:30pm – 2:30pm

T 2:00pm – 4:00pm

Or by appointment

Instructor

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Office Location

180-505

Office Hours

T 12:00-4:00pm

Th 3:00-4:00pm

Course Meeting Times

MWF 11:10 – 12:00 am

Location: 180-230

Course Overview: This course is designed to train students in critical evaluation and formal presentation of current topics in environmental science and management. Students will be tasked with identifying, evaluating, and presenting key issues related to conservation and management activities, such as water and soil conservation, sustainable fisheries, forest fire fuel reduction, assisted species migration, and climate change mitigation. A variety of individual and group assignments will prepare students to critically evaluate controversial topics, analyze the reliability of source information, identify strong supporting evidence, synthesize knowledge, and produce professional, thorough presentations of material. This course satisfies the senior project requirement for graduation.

Learning Objectives:

- Critically evaluate controversial topics and complex, real-world issues.
- Understand and integrate ideas from ecological, social, and economic fields to facilitate the development of persuasive arguments to affect positive change.
- Provide constructive feedback and evaluation of others work.
- Develop communication techniques to persuade or inform a target audience.
- Articulate pros and cons of arguments as supported by reliable evidence and sufficient research.
- Gain skills to work respectfully and efficiently with colleagues from diverse backgrounds, in interdisciplinary settings.

Prerequisites: Requires completion of GE Area A and ERSC 363/NR306/NR326

Required Text: No text required for course. Readings will be posted to PolyLearn.

Class Etiquette:

- Cell phone use is not permitted in class. Keep the texting, emailing, and social media for your own personal time. If you are caught using your phone, you will be warned once and then asked to leave the class.
- Office hours are for reviewing complex material, advising, and mentoring. Office hours are not designed as one-on-one lecture time for students who miss class.
- We do not respond to email after 5pm or on weekends. Plan your course emergencies accordingly.

Disability

If you have a documented disability and wish to discuss academic accommodations, please contact me as soon as possible. We want you to have a great experience in this class no matter what your background or needs!

Individual and Group Assignments

Mock Negotiation (Group): Participate in simplified international climate change negotiations to understand the policy-relevant science, experience the sociopolitical dynamics of negotiations, and engage in crafting workable solutions. Each participant represents a delegate from a specific nation, region of the world, or interest group. Everyone must then work together, in his or her representative role, to reach an agreement that successfully addresses global climate change.

Article Review (Individual): Choose one peer-reviewed article related to the topic you have been assigned and critically evaluate the article for content, presentation of scientific information, and conclusions drawn. The assignment requires synthesis of information and will provide practice in assessing the quality and strength of scientific information.

Literature Review (Individual): Provide a review of existing scientific literature and the application of ecological methods and concepts to addressing scientific inquiries. You will identify a topic with the assistance of the instructors. There will be a series of deadlines to help you slowly build a strong, well-referenced review of the topic.

Debate (Individual & Group): Groups will be assigned current controversial topics in environmental science and natural resource management. You will prepare arguments to support both sides of the debate that are well informed and based in science. Groups will be evaluated on their professionalism, clarity, solidity of arguments, and use of verifiable claims.

Class Group Work & Discussion: All assignments require active group interaction and peer evaluation. Come prepared to participate in every class meeting. Your professionalism grade is based on engagement, participation, and respect.

Homework Policy

Assignments are to be submitted via PolyLearn on the due date. Any member may edit group submissions, but only the final document is graded. Late assignments will be penalized at 20% per day and will not be accepted after two days.

Academic Dishonesty

Assignments will task you with critically evaluating the work of others, constructing arguments, and supporting your arguments using the work of others. As such, it is critical that you avoid plagiarism by properly cite anything you pull.

- The use of others' ideas (quoted, paraphrased, or otherwise) without proper referencing constitutes plagiarism.
- Plagiarism is easily avoided by simply giving credit where credit is due.
- Plagiarism may lead to failure of the course and/or referral to the Dean of Student Affairs.

Attendance and Participation

Attendance is mandatory. Attendance and participation will count toward your professionalism grade. Class time is designed to expose you to different topics and techniques, which will provide the foundation for your individual and group assignments. Your presence is essential for your group to function well.

Grading

- Mock Negotiation (20%)
- Article review (5%)
- Literature Review (25%)
- Debate (25%)
- Peer evaluation of assignments (10%)
- Group peer evaluation (5%)
- Professionalism (10%)

Make-up assignments will only be offered to students with extenuating circumstances and proper documentation.

Grading Scale is as follows: 100 – 93% = A, 92 – 90% = A-, 89 – 87% = B+. 86 – 83% = B, 82 – 80% = B-, 79 – 77% = C+, 76 – 73% = C, 72 – 70% = C-, 69 – 67% = D+, 66 – 63% = D, 62 – 60% = D-, < 60% = F. *A curve may be generated at any time at the discretion of the instructor.*

Tentative Schedule

Week	Subject	Readings & Assignments
Sept 19	Course Introduction	Read Syllabus Topics in Natural Resources List (Due Sept 26)
Sept 26	UN Conference of Parties Process Expert Group Preparation Country Assignments & Research	Expert Report (Due Sept 30th) Presentations (Due Oct 5th)
Oct 3	Country Presentation Preparation Conference Day I Draft Statement Preparation	
Oct 10	Draft Statement Preparation Conference Day II Research Guides Guest Lecture by Katherine O'Clair**	Statement & Peer Eval. (Due Oct 12th) **Meet at library computer lab
Oct 17	The Scientific Process & Peer Review Critical Evaluation of Articles Article Review Research Time	Article Review Topic Selection Article Review Due (Due Oct 24th)
Oct 24	Writing Review Papers Annotated Bibliographies Special Lecture: Managing Citations	Review Topic (Due Oct 28th) Modified Annotated Biblio (Due Nov 2nd)
Oct 31	Literature Review Peer Exercise Literature Review Research Time (W) Peer Review (F)	Literature Review Draft (Due Nov 4th) Peer Review Due (Due Nov 7th)
Nov 7	Peer Review Meetings Literature Review Research Time NO CLASS FRI (Veteran's Day)	Literature Review (Due Nov 16th)
Nov 14	Literature Review Research Time (M) Introduction to Debating Persuasive Argument Exercise	
Nov 21	NO CLASS – Happy Thanksgiving!	
Nov 28	Debate Group Work	Debate Indiv Arguments (Due Dec 5th)
Dec 5	Debates	