



SYLLABUS

ENR 4900.02

Capstone
Fall 2022

COURSE OVERVIEW

This section of the SENR senior capstone course will focus on the integration of students' knowledge of social-ecological systems, natural resources management, and environmental science with an emphasis on water quality and aquatic issues from local to global scales. The objective of a capstone course is to provide students with an opportunity to integrate the coursework, knowledge, skills, and experiential learning gained throughout their academic career, thus allowing students to demonstrate their mastery of learning across the curriculum in preparation for further career development. The primary goal of ENR 4900 is therefore not to increase your knowledge of a particular topic but to give you the opportunity to implement those learned skills through the development of a team project. The team project will allow each member to apply their unique skills and knowledge toward a common goal.

The class will work as a group for multiple stakeholders to develop specific deliverable outcomes (e.g. management plans, manuals, curricula, multimedia content, etc.) required by the client to meet specific needs. We will use a student-led project management framework to facilitate completion of the project, such that the work will be divided among several teams and cohesion provided by project coordinators and a project manager. The instructors will act as consultants, but ultimately the success of the final project will be determined by the students. The course will also include several training sessions and seminars designed to improve students' transferable skills and readiness for the job market.

Contact Information

Instructor: Zachary Steffensmeier
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Lecture Location: Kottman Hall 370
Lecture Time: Monday and Wednesday 12:15-1:35 PM.



Grade Breakdown:

I. Individual Development

Professional Portfolio	15%
Site Visit Critique	5%
Peer Assessments	10%
Participation	10%

II. Group Project

Team/Executive Proposals	10%
Team/Executive Updates	10%
Final Project	40%

Total **100%**

Grading Scale

93–100: A
90–92.9: A-
87–89.9: B+
83–86.9: B
80–82.9: B-
77–79.9: C+
73–76.9: C
70–72.9: C-
67–69.9: D+
60–66.9: D
Below 60: E

Course Format and Expectations

Format: The majority of this course will be student-led. This means that students are responsible for identifying and requesting the information or guidance they need to successfully achieve the objectives of the course. Therefore, our meeting times will be used to discuss current issues, work on team projects, and develop career skills using a workshop format, group and class discussion, and discussions with guest lecturers. Students are expected to come to class and actively participate in class discussions and activities. The semester will loosely be divided into three sections: a) project management and topic development; b) research; and, c) product development. We will spend the first third of the semester developing professional skills, learning about the Group Project and generating topic ideas. In the second third of the semester, we will have a number of guest speakers presenting their perspectives on environmental and natural resource issues, how they engage the public through outreach activities, and their career paths in the field. During this time teams will be working to research their topics and develop specific plans for realizing their objectives. In the final part of the semester almost all class time will be devoted to creating the products required by the client and pulling the final project together.



Readings: There is no required textbook for this course; however, we have created a “Resources” module on the class Carmen page. This module contains various articles, documents, and other resources we consider important for the successful completion of the class project. It is strongly suggested that you read the resources provided for you.

Participation: Students are required to attend all class sessions. Regular attendance is a necessary, but insufficient, condition for a passing grade: active participation in discussions and in the group project is necessary. You are responsible for being aware of any changes to the syllabus and information presented and discussed in class, for materials distributed in class, and classroom exercises and assignments. A major portion of your grade will be determined by the Peer Assessments conducted throughout the semester that will take into account your participation in group activities.

****SCHEDULE (SUBJECT TO CHANGE)**

Week	Date	Topic	Assignments
<i>Part 1: Project management and topic development</i>			
1	8/24	Introduction to Capstone and Student-Led Management	
2	8/29	Finding jobs and writing personal statements	
	8/31	<i>Guest Lecture</i>	
3	9/5	Labor Day: No class	
	9/7	Workshop: Team assignments and Topics	Personal Statement due
4	9/12	CV and resume development	
	9/14	Workshop: Proposal development	Cover Letter & CV/Resume due
<i>Part 2: Research</i>			
5	9/19	<i>Guest Lecture</i>	
	9/21	Workshop: Research	Proposals due
6	9/26	<i>Guest Lecture</i>	
	9/28	Workshop: Communicating Science	
7	10/3	<i>Guest lecture</i>	
	10/5	Workshop: Budgets and Resources	Team/Executive Update #1 due
8	10/10	<i>Guest lecture:</i>	Team Member Peer Assessment #1



	10/12	Workshop: Research	
9	10/17	<i>Guest Lecture</i>	
	10/19	Workshop: Project Manager and Coordinators Updates	
<i>Part 3: Product development</i>			
10	10/24	Workshop: Project development	Site Visit Critique due
	10/26	Workshop: Project development	Team Member Peer Assessment #2
11	10/31	Workshop: Project development	Happy Halloween!
	11/2		Team/Executive Update #2
12	11/7	Workshop: Prepare executive presentation for CAC and	
	11/9	Workshop: Practice executive presentation for CAC; Finalize posters for EPN	CAC Presentation 7pm
13	11/14	Workshop: Prepare team presentations for GreenSpot	
	11/16	Workshop: Practice team presentations for GreenSpot	GreenSpot Presentation 7pm
14	11/21	Workshop: project finalization	
	11/23	Thanksgiving Break: No classes	
15	11/28		
	11/30	Last Day of Classes	Final Project due All Peer Assessments due
16	12/5	Present Posters at Environmental Professionals Group: 5-6 pm *Note, this is a Monday.	Networking event



I. Individual Development

Professional Portfolio (15%): A major objective of a senior capstone course is to help students develop their readiness for a career in their field. One key to obtaining first an interview and then a career in your field is to present your experience and goals in a succinct and professional manner. Each student will create and submit for review a professional Cover Letter (5%), Curriculum vitae/Resume (5%), and a Personal Statement (5%). Instructions for each component of the Professional Portfolio will be provided on Carmen and in class.

Site Visit Critique (5%): To successfully meet the objectives of the stakeholder, firsthand experience of similar sites/programs is essential. Therefore, each student is required to visit at least one site (e.g. city park, Metropark, nature preserve, etc.), though are encouraged to visit numerous sites. Students will then write a short summary and critique of the program/park that they visited. Instructions for writing the critique will be available on Carmen and discussed briefly in class. A list of acceptable sites and programs to visit will be provided.

Peer Assessments (10%): In almost all job advertisements employers state that job candidates should be able to work independently and as part of a team. This means that employers want to work with people who can complete assigned tasks on time and up to standard, and to then integrate that work with a team to achieve larger goals. To become proficient in these skills, we will employ a Peer Assessment framework wherein Team Members will receive peer assessments by the Project Coordinators three times over the course of the semester, while Project Coordinators and the Project Manager will be assessed at the end of the semester by team members and coordinators, respectively. Assessment rubrics will be available on Carmen so that students will know what aspects of their performance are being assessed.

Participation (10%): Students are required to attend all class sessions. Regular attendance is a necessary, but insufficient, condition for a passing grade: active participation in discussions and in the group project is necessary. In addition, students are expected to pay attention to and engage guest speakers – this means computers and other devices should be turned off/put away during guest lectures. Overall participation in all aspects of the class will be assessed by the instructors.

*NOTE: We will occasionally post information for relevant external events and indicate that attendance at these events will be worth bonus points on your final grade. If you become aware of other events that you would like to attend and feel they might be relevant to course material, please let me know in advance and I will decide if attendance warrants bonus points.

II. Group Project

The major component of a senior capstone course is the group project, as reflected in the percentage of your final grade determined by the success of the final project. The details of this project (and each of the assignments listed below) are described in the document “Group Project SP19” in the Module titled Group Project Details in Carmen. In brief, we will use a student-led project management framework to facilitate the project: there will be one student Project Manager, five Project Coordinators, with the remaining students being assigned as Team



Members to one of four/five teams. The basis of your final Group Project grade will be based on the following three assignments:

Team/Executive Proposals (10%): Each team will develop a proposal outlining their specific topic and their plan of action for accomplishing their specific tasks, which will be submitted by the Project Coordinators. The Project Manager will submit an Executive Proposal that summarizes the objectives and general action plan of all teams to ensure cohesiveness among all components of the project. All teams will receive feedback on their proposals and are expected to incorporate that feedback to meet the needs of the client.

Team/Executive Updates (10%): Each team, led by their Project Coordinator, will submit two brief updates about their progress on the work submitted in their proposals throughout the semester. This helps to ensure that all teams are on track toward completing their part of the overall project and for further feedback. The Project Manager will additionally provide Executive Updates that outlines advances on the project, areas requiring more attention, and an overall assessment of progress.

Final Project (40%): For this project you are tasked with developing tangible products for the client. For example, one team may be tasked with producing a series of short videos that discuss the role of wetlands in water quality for three different audiences; therefore, at the end of the semester you are expected to submit videos with appropriate language and content for each of those audiences. The Project Manager will work closely with the client and the Project Coordinators to ensure cohesion and consistency among the components each team is working on. The quality of the overall project will be assessed by instructors and the client.

Written Assignments: Format and Submission

All written assignments are to be submitted electronically through Carmen by 11:59 pm on the date that they are due, with the course number, your last name or group name, and assignment name as the file name (e.g. "4900 Proposal_Biodiversity Group"). Written assignments should have 1" margins, 12 pt Times New Roman font, double line spacing, and all pages should be consecutively numbered, including the cover page. All written assignments should include a cover page that provides the names of all group members, name.#s, title of the assignment, and the date. In-text citations and literature cited should follow instructions from the journal, Freshwater Science. Note that the cover page, literature cited, figures and tables, will not count toward page limits given for assignments.

Textbook

There is no textbook for this class. However, required readings may be assigned throughout the semester.

Learning objectives:

1. Explain how individuals, organizations, and institutions can successfully address complex environmental and natural resource management issues at local and global scales.
2. Identify key stakeholders involved in natural resource and environmental management issues and identify ways to engage these stakeholders in planning and decision-making processes.



3. Work as a member of an interdisciplinary team to create and communicate, via deliverable outputs, a shared understanding of a complex environmental or natural resource issue and strategies for addressing that issue.
4. Communicate effectively in a professional setting to promote a plan of action to address an environmental or natural resource issue.
5. Effectively communicate to potential employers your values, interests, career goals and the knowledge and skills you have to offer.

Late Work Policy

The penalty for late assignments is 20% of the assignment total per day. We will not extend without a valid reason. There should be extenuating circumstances for missing a scheduled activity, quiz or exam. In these cases, *early* arrangements will need to be coordinated.

****IMPORTANT:** You must contact the instructors PRIOR TO a planned conflict to make arrangements for modified deadlines. Otherwise, no arrangements will be made. If you are ill the day of an assignment/exam, you must reach out to the instructors with verification of your absence on the day of the missed deadline, otherwise no accommodations will be made. If you would like any clarification on this, don't hesitate to reach out.

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments. Please refer to Student Rule 7 in its entirety for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor. Please refer to Student Rule 7 in its entirety for information about makeup work, including definitions, and related documentation and timelines. Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (Student Rule 7, Section 7.4.1). "The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (Student Rule 7, Section 7.4.2). Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See Student Rule 24.)

Academic integrity policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow



the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an "excuse" for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If we suspect that a student has committed academic misconduct in this course, we are obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact us.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages ([COAM Home](#))
- *Ten Suggestions for Preserving Academic Integrity* ([Ten Suggestions](#))
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on title IX

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false



pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

This course adheres to The Principles of Community adopted by the College of Food, Agricultural, and Environmental Sciences. These principles are located on the Carmen site for this course; and can also be found at <https://go.osu.edu/principlesofcommunity>. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (<https://equityandinclusion.cfaes.ohio-state.edu/>). If you have been a victim of or a witness to a bias incident, you can report it online and anonymously (if you choose) at <https://studentlife.osu.edu/bias/report-a-bias-incident.aspx>.

Counseling & Consultation Services/Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may



lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life Counseling and Consultation Services (CCS) by visiting ccs.osu.edu or calling (614) 292- 5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Prevention Hotline at 1-(800)-273-TALK or at suicidepreventionlifeline.org.

David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor. He is available for new consultations and to establish routine care. To schedule with David, please call 614-292-5766. Students should mention their affiliation with CFAES when setting up a phone screening.

ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Go to <http://ods.osu.edu> for more information.