
NREM 494 – ENVIRONMENTAL PROBLEM SOLVING

FALL 2017 SYLLABUS

CLASS HOURS: MONDAY 12:45-2 PM / TUESDAY 3-4:15 PM

LOCATION: SHERMAN 111

INSTRUCTOR INFORMATION

Instructor: Kimberly M. Carlson
Assistant Professor, NREM
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Office Hours: By appointment, Sherman 130

COURSE OVERVIEW

This 3-credit capstone course allows for the application of research, analytical methods, and management tools to an environmental and/or management issue, with a focus on teamwork, oral, and written communication.

LEARNING OBJECTIVES

The successful student will be able to:

1. Apply the theories, core concepts, and skills in natural resources and environmental management to an environmental and/or management question of contemporary importance.
2. Understand and communicate case studies and project at the level of a natural resource and environmental professional, integrating and weighing the socio-economic, sustainability, and cultural aspects.
3. Use structured decision making to achieve a repeatable decision-making process, utilizing explicit, quantifiable objectives, identifying specific management alternatives to meet those objectives, and using models to predict the effect of management actions on resource objectives.

COURSE MATERIALS

Structured Decision Making; A Practical Guide to Environmental Management Choices: R. Gregory, L. Failing, M. Harstone, G. Long, T. McDaniels, D. Ohlsen; ISBN: 978-1-4443-3342-8; 2012

ASSESSMENT AND GRADING

Participation	150
DISC Assessment	50
Mid-term Exam	100
Capstone Project	600
Final Exam	100
Total	1000 points

**Participation is based on the student's engagement in class activities, and includes attendance and active participation in class & group activities. Students are responsible for setting up, participating in, and completing the group project outside of class time.*

Grading Scale

A+	$x \geq 98$	C+	$80 > x \geq 78$
A	$98 > x \geq 92$	C	$78 > x \geq 72$
A-	$92 > x \geq 90$	C-	$72 > x \geq 70$
B+	$90 > x \geq 88$	D+	$70 > x \geq 68$
B	$88 > x \geq 82$	D	$68 > x \geq 62$
B-	$82 > x \geq 80$	F	$x < 60$

Participation (150 points)

Students are expected to actively participate and engage in classroom discussions as well as the team capstone project. Engagement includes attending class prepared (e.g., finishing readings ahead of time), asking questions, contributing ideas, taking notes (in case studies that involve writing), presenting group findings, actively listening to others and respecting their beliefs, and staying until class ends. With respect to the capstone project, students are expected to support their group with their time, energy, and skills. Assessment of participation will be based on in-class evaluation by the instructor (100 points), as well as evaluation by peers within capstone teams (50 points).

DISC Assessment (50 points)

You will take a DISC Assessment to understand your behavioral style. Then, based on your DISC assessment profile, you will write two papers (one at the beginning and one at the end of the course) reflecting on what this says about you as a project leader and participating team member.

Midterm Exam (100 points)

The mid-term exam will be given in class. It will cover materials from lectures, readings, and discussions. The mid-term will be composed of identification questions as well as short essay questions.

Capstone Project (600 points)

The capstone project brings together the skills that NREM undergraduates have developed during their time in the program. By identifying and addressing real-world problems using a structured decision-making framework, they will engage with actors in their communities to make difference locally through a contribution of their passion and expertise. The project empowers students to learn more about what motivates them, and to gain important professional skills and connections that will help them to transition to work, service, or higher educational opportunities. The capstone asks students to select a

problem of great importance and interest, and then to brainstorm and evaluate alternative solutions to that problem, with the guidance of their instructor as well as individuals and organizations in Hawaii. By the end of the semester, they will present their project to a community of students and mentors.

Final Exam (100 points)

The final exam will be given in class (please note official exam schedule). It will cover materials not covered in the mid-term exam. The final will be composed of identification questions as well as short essay questions.

EXPECTATIONS FROM STUDENTS

I aim to create a safe, respectful, and effective space in which all students can learn. Therefore, at a minimum, students are expected to follow these guidelines:

1. Attend class, arrive on time, and stay the entire length of the class;
2. Avoid using mobile phones during class – this includes texting, games, and other non-emergency uses;
3. Use personal laptops/tablets only for class-related activities;
4. Exhibit conduct and attitude appropriate for a future natural resource professional, including appreciation for ethnic and gender diversity, respect for the instructor, speakers, and fellow class participants, and acknowledgement and acceptance of differing ideas and opinions;
5. Practice and honor the University of Hawaii Student Code of Conduct; and
6. Focus on learning and rather than grades alone; imagination, creativity, and critical thinking are more important than memorization.
7. If you have an idea, question, or comment, please raise your hand to share with the whole class; side conversations disrupt the classroom environment and the instructor reserves the right to ask students to leave in the case of disruption.

The instructor reserves the right to ask a student acting in a disrespectful manner to leave for the remainder of the class period. This student will receive a score of zero for any assignments or exams associated with that class period. Severe acts of unacceptable behavior will result in an immediate drop from class and a report filed with the school administration.

COURSE REMINDERS

Class Attendance

Because this is a project-based course with a large component of learning taking place during in-class activities, class attendance is required to pass the course. We will take attendance each class session. If you miss zero to five classes, your grade will not be affected. If you miss between six and ten classes, you will be docked ½ letter grade (-50 points). If you miss more than 10 classes, you will be docked a full letter grade (-100 points). If you arrive 10 or more minutes after class starts, this will count for ½ of an absence. Absences with 1) documentation of a medical excuse (e.g., a doctor's note), 2) documentation of death in the immediate family, or 3) due to travel to athletic competition or other sponsored school activity will not be counted against you.

Exams

Students are expected to take exams on the designated date at the designated time unless extenuating circumstances arise. Family trips, study abroad programs, and volunteer work are not acceptable excuses to change the exam date. If you have more than two final exams scheduled in a single day, please contact me early in the semester and we can arrange an alternate time to take the test. If you unexpectedly miss the midterm exam due to (1) documented death in the immediate family or (2) documented medical excuse, you will be expected to take an alternate test during finals week. If you unexpectedly miss the final exam due to an emergency, you will receive an incomplete for the course and will be expected to take an alternate test during the following semester to clear the incomplete.

Deadlines

Due dates are strictly imposed. Late work will be accepted with a 10% penalty for each day of delay so that after 10 days, no points will be awarded for the assignment. If you have a (1) documented death in the immediate family or (2) documented medical excuse please contact the instructor to arrange an alternate submission date. Class participants are responsible to review the due dates for each class deliverable.

Contacting the Instructor

I am available to answer questions before and after class, during office hours by appointment, or over email.

Students with Disabilities or Special Needs

Any student who feels s/he may need an accommodation based on the impact of a disability is invited to contact the KOKUA Program (Office for Students with Disabilities) to ensure reasonable accommodations in my course. KOKUA can be reached at (808) 956-7511 or (808) 956-7612 (voice/text) in room 013 of the Queen Lili'uokalani Center for Student Services.

Appeal Process

Every teacher makes mistakes. If you have questions as to how your exams/papers were graded, please see me. If I made a mistake adding up points on your exams/papers, bring the exam/paper to me immediately. If you think that an exam question was graded incorrectly, you must provide written documentation supporting your case; make a copy of lecture notes, books, and/or scientific articles which would support awarding extra points. No whining or begging allowed; nobody's future will be jeopardized because of one or two points.

Integrity and Honesty

Scholastic dishonesty of any form is not tolerated. Scholastic dishonesty includes (but is not limited to): copying someone's answers on an assignment or exam, letting someone copy answers from your work, copying someone's assignment and calling it your own, informing other students of exam material, using assignments for this course in other courses, using assignments for other courses in this course, plagiarism (including copying other people's work without citing the source), and fabricating or falsifying data, research procedures, or analysis. All materials submitted to the instructor should be the class participant's own work. If you are unsure on how to do proper citation to avoid plagiarism, please see

the instructor. If you are caught cheating on any assignment I will give you an "F" for that assignment, and I may take disciplinary action at the University level. Please see the UH Academic Integrity Policy on the web or in the university bulletin for additional details.

Take Care of Yourself

A recent American College Health Survey found stress, sleep problems, anxiety, depression, interpersonal concerns, death of a significant other, and alcohol use among the top ten health impediments to academic performance. Students experiencing personal problems or situational crises during the semester are encouraged to contact the Counseling and Student Development Center (CSDC) in the Queen Lili'uokalani Center for Student Services. Individual, couples, and group counseling services are **confidential** and **free of charge** to students. Call CSDC at (808) 956-7927 or walk into the Center to set up an appointment.

COURSE SCHEDULE

Week	Day	Topic	Readings	Assignments
1	August 21	Introduction	Syllabus	
1				
2	August 28	Structuring Environmental Management Choices	Gregory CH 1	
2	August 29	Identify Project Problem		DISC Assessment
3	September 4	NO CLASS – LABOR DAY		
3	September 5	DISC Assessment (M’Randa Sandlin)		
4	September 11	Foundations of Structured Decision Making & Decision Sketching	Gregory CH 2&3	
4	September 12	Create Project Decision Sketch		
5	September 18	Working with Stakeholders	Conroy CH 4	
5	September 19	Identify Project Stakeholders		DISC Reflection 1/ Project Paper v1
6	September 25	Identifying and Quantifying Objectives	Gregory CH 4	
6	September 26	Identify Project Objectives		
7	October 2	Guest Lecture: Catherine Chan (Surveys)		
7	October 3	MIDTERM		
8	October 9	Identifying Performance Measures	Gregory CH 5	
8	October 10	Identify Project Performance Measures		Project Paper v2
9	October 16	Incorporating Uncertainty in Decision Making	Gregory CH 6	
9	October 17	Synthesize Data		
10	October 23	Creating Alternatives	Gregory CH 7	
10	October 24	Analyze Data		Project Paper v3
11	October 30	Characterizing Consequences	Gregory CH 8	
11	October 31	Analyze Data		
12	November 6	Guest Lecture: Making Trade-offs	Gregory CH 9	
12	November 7	Identify Best Project Alternative		Project Paper v4
13	November 13	Learning	Gregory CH 10	
13	November 14	Present Preliminary Results to Stakeholders		
14	November 20	Implementation	Gregory CH	

			11	
14	November 21	Practice final presentation		DISC Reflection 2
15	November 27	TBA		
15	November 28	TBA		
16	December 4	FINAL PRESENTATION		
16	December 5	Review for final		Final Paper
17		FINAL EXAM		