

Environmental Decision-Making

NRC 494 EI Spring 2022

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In-person Meetings: M/W 10:10am-12:05pm; Holdsworth 308
One-on-one office hours: Th 9:00-10:00am & by appointment, via [Zoom](#)

Over the past 30 years, there has been a growing recognition amongst environmental advocates, resource managers, policymakers and researchers that the underlying cause of most environmental, conservation and sustainability issues is **human behavior**. As NRC and ENVIRSCI majors, you have received extensive technical training in how natural systems operate yet relatively little training when it comes to influencing or understanding how people make environmental decisions that affect those natural systems. Recognizing the fundamental role that human decision-making plays in shaping the environment reveals a new set of tools and approaches for both understanding the challenges we face *and* confronting those challenges effectively. We will spend the semester exploring the **underlying factors** that drive environmental decisions, the **key challenges** that environmental issues pose for decision makers, and **insights from the behavioral, social and communications sciences** into designing effective environmental behavior change campaigns and strategies. In doing so, we will gain a greater appreciation for the importance of focusing on *people* when our aim, ultimately, is to protect the natural world.

Course goals and learning objectives

After taking this course, students will be able to do the following:

- 1) Understand and appreciate the importance of looking at environmental conservation and sustainability through the lens of behavioral and social science;
- 2) Recognize the behavioral underpinnings of the conservation challenges we face;
- 3) Uncover the core drivers of individual and collective environmental decision-making, including psychological, social, political, cultural and contextual/structural factors;
- 4) Identify and weigh the competing interests and motives of diverse stakeholders, including financial, familial, attitudinal and other factors;
- 5) Detect key barriers to and facilitators of positive conservation behavior;
- 6) Implement evidence-informed tools and approaches to change their own and others' environmental behaviors;
- 7) Develop their own, evidence-based environmental behavior change campaigns.

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Assignments & Grading*

Engagement	10%
Forum Posts	10%
Conceptual assessments (x2)	20%
Personal change assignment	10%
Scales of change essay	10%
Ethics of behavior change essay	10%
Campaign project	30%

*Note: As the semester progresses, I may decide to change the number and/or nature of the course assignments. I will not *add* any new assignments (only ever take away or reduce existing ones); it is possible that the relative weight/value of assignments will change as a result.

Assignment details

Engagement (10%): Active engagement is **required** for this course. Attending the in-person sessions (which will be ‘live streamed’ as feasible) is the best way to demonstrate your engagement with the course, assuming you are healthy and have not had any recent suspected or confirmed COVID exposures. Class will meet biweekly, 10:10a-12:05p Mondays and Wednesdays in Holdsworth 308. If you are unable to participate due to any reason, please email me as soon as you know that you will be out of class. Lack of engagement due to documented illness or other reasonable excuse will not be penalized. Students who are having any trouble engaging with class sessions due to COVID-related barriers need to email me and set up a time to discuss alternative options as soon as possible. Class sessions will be recorded and posted to the course website whenever feasible. Recordings are *not* to be shared with anyone not currently enrolled in the course. If you are unable to participate in class on a given day, you must watch the recording as soon as is feasible given the circumstances in order to receive partial engagement credit.

Forum Posts (10%): Prior to the start of each class meeting, students will be asked to **respond to a brief question** via Forums posted on Moodle. To receive credit, your response must be submitted by **8am** on the day of class. Responses need not be long (1-2 short paragraphs). You must also respond to at least one other student’s Forum post for that day in order to receive full credit (so, 2 posts per class day; 4 per week). Again, your responses do not need to be long, only thoughtful (and respectfully stated). **NOTE:** If there is no Forum discussion posted for a given class on Moodle, that means you do not need to do any posting for that day. Initial posts and response posts are equally important.

Conceptual assessments (20%): Students will submit two short conceptual assessments during the semester. Each assessment is worth 10% of your course grade. The first CA is **due 2/16** and the second CA is **due 3/28**. Both assessments should be uploaded to

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Moodle directly via the appropriate link under the Assignments section by **8am** on their due date. Assessments can be completed in one of two forms. The **preferred format** is a 4-5 minute Powerpoint (or similar) presentation with a recorded voice-over/narration. The easiest way to make your recording will be to start and record a Zoom session in which you simply share the slidedeck (your video can be on or off, whichever you prefer). An alternative option is to submit a 400-500 word written assessment that responds to the prompt I'll provide. Please note: if you choose the written version, you will be graded in part on the quality and clarity of your writing.

Personal change project (10%): This should be a fun, enlightening opportunity to try changing your (environmentally-relevant) behavior using evidence-based techniques. More details will be provided during the semester. In addition to the actual efforts involved in tracking and trying to change your behavior, this assignment consists of three short written components that must be turned in on the due dates listed on Moodle: goal setting (can be completed in-class, **due 2/25**); strategy selection (100-200 words, **due 3/25**); and post-change reflection (200-words, **due 4/15**).

Scales of change (10%): In this short persuasive essay (500 words max, check your word count before submitting!), I want you to “pick a side” in the larger debate about which scale of behavioral intervention you think environmental and resource management advocates should be most focused on. Your answer should be informed in part by the specific environmental issue or behavior you are interested in (e.g., waste, energy, consumer habits, etc.). This assignment is **due 4/4**.

Ethics of behavior change (10%): In preparation for our in-class activity on **4/25**, each student should explore (via short essay, 500 words max) the question of whether and under what conditions/constraints it is ethical or appropriate to change other people's behavior to achieve goals of environmental sustainability and conservation. This is not meant to be a persuasive essay, in which you pick a side and try to make convincing arguments in favor of your perspective; rather, the goal here is to spend some time exploring this complicated issue from various angles using the class readings and concepts as well as your own life experiences to inform a sort of “self-dialogue.”

Campaign development project (30%): This semester, we will work together in collaboration with UMass Campus Dining towards developing and implementing an evidence-informed behavioral intervention aimed at reducing meat consumption in campus dining facilities. The project will entail two phases, and you will work in small teams of 4-6 students during each phase (with teams changing between phases 1 and 2). We will spend an entire day early in the semester introducing the project and our project partners and will provide further information at that time. There are various project “deliverables” that will be due throughout the semester and that will keep you and your team(s) on track to complete a successful behavior change campaign on our campus.

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Details regarding specific assignments involved in the term project (and due dates) will be provided early in the semester to help you in planning.

Note on writing

As juniors and seniors, I expect any writing that you turn in for assessment to be clear, concise and totally free of all typos and grammatical errors. Poor writing will significantly, negatively affect your grade on written assignments. There are multiple resources available to students at UMass to help you improve your writing; please take advantage of these (even if you already consider yourself to be a strong writer).

Asynchronous course materials

There is no core text for this class and no book to purchase. Instead, I will post readings, short videos, documentaries and podcasts on the course website on Moodle.

What does Integrative Experience mean?

This course satisfies the Integrative Experience General Education requirement (IE) for students in the Natural Resources Conservation (NRC) and Environmental Science (ENVIRSCI) majors. The upper-division integrative experience (IE) provides a structured context for students to reflect on their own learning and explore the connections between the broad exposure provided by General Education and the more focused exposure of their major.

Integrative learning comes in many varieties: connecting skills and knowledge from multiple sources and experiences; applying theory to practice in various settings; utilizing diverse and even contradictory points of view; and, understanding issues and positions contextually.

The course addresses the goals of IE by fulfilling each of the following three criteria:

1. Providing a structured, credited context for students to reflect on and to integrate their learning and experience from the broad exposure in their General Education courses and the focus in their major.
2. Providing students with the opportunity to practice General Education learning objectives such as oral communication, collaboration, critical thinking and interdisciplinary perspective-taking, at a more advanced level.
3. Offering students a shared learning experience for applying their prior learning to new situations, challenging questions, and real-world problems.

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The activities and assignments you'll complete in this course have been designed to achieve each of these goals while building your knowledge of the core course topic, decision-making for conservation. That is, the Integrative Experience-aspect of this course has been fully integrated into the class; it is not an extra "add-on."

Class norms, conduct and policies

Assignments: Unless you have made arrangements with me prior to the deadline, late work will be penalized by 5% for every day the assignment is late.

Communication: During class and office hours are the best times to ask questions but I will do my best to respond to emails within 48 hours during the week, if not sooner. **Please include NRC 494** in the subject line of emails.

Active engagement: This course is driven by active participation and dialogue; there will be some lecturing during our class meetings but my goal is to spend much of our time in conversation with one another, so your active engagement is critical. I ask that we maintain a high level of respect in our classroom, whether in-person or virtual. When meeting in person, showing respect for one another includes consistent, proper wearing (above the nose) of tight-fitting masks to reduce risk of in-classroom transmission of COVID and other infectious diseases.

Accommodations: The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services, Learning Disabilities Support Services or Psychological Disabilities Services, you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me **within the first two weeks of the semester** so that we may make appropriate arrangements.

Everyone has the right to be addressed by the name and pronouns that they use for themselves. Students can indicate their preferred/chosen first name and pronouns on SPIRE, which appear on class rosters. Please let me know what name and pronouns I should use for you if they are not on the roster. A student's chosen name and pronouns are to be respected at all times. Also, please make sure that your name in Zoom is correct.

Grades

I use a simple summative approach, with the assignments adding up to 100 points. Letter grades are assigned as follows: **A** (94-100), **A-** (90-93), **B+** (87-89), **B** (84-86), **B-** (80-83), **C+** (77-79), **C** (74-76), **C-** (70-73), **D+** (67-69), **D** (64-66), **F** (below 64).

Academic honesty policy statement

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. The procedures outlined below are intended to provide an efficient and orderly process by which action may be taken if it appears that academic dishonesty has occurred and by which students may appeal such actions. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent. The University requires honesty of all its members in their academic work. Honesty is necessary to the learning process, and is integral to the atmosphere of genuine inquiry and intellectual curiosity that the University seeks to foster. Academic dishonesty not only contradicts the expectations of a community whose central purpose is the pursuit of intellectual endeavor, it violates University rules and regulations, a fact of which all students must be aware. For more information about what constitutes academic dishonesty, please see the Dean of Students' website:

http://www.umass.edu/dean_students/codeofconduct/acadhonesty/

Class meetings and key due dates for course assignments, subject to change (all course materials will be posted on Moodle, clearly marked by day)

1-26 What is environmental decision-making?

Due before class: Forum post; complete pre-term survey & assessment

1-31 Why does EDM matter?

Due before class: Forum post

2-2 Introduction to term project

Due before class: Forum post

2-7 What drives behavior? Framework and key insights

Due before class: Forum post

2-9 What drives behavior? A realistic view of human behavior

Due before class: Forum post

2-14 What drives behavior? Zooming out to see systems and context

Due before class: Forum post

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- 2-16 What drives behavior? Identifying barriers to change**
Due before class: Forum post; Conceptual Analysis #1
- 2-22 Personal SMART goal setting**
Due before class: Nothing
- 2-23 Phase 1 team time**
Due before class: Campaign Development Project #1
Due on Friday, 2-25: Personal Change #1
- 2-28 Student Presentations: Phase 1 of term project**
Due before class: Campaign Development Project #2
- 3-2 Changing behavior I**
Due before class: Forum post
- 3-7 Changings behavior II**
Due before class: Forum post
- 3-9 Changing behavior III (w/ guest Kevin Green)**
Due before class: Forum post
- 3-21 Changing behavior IV**
Due before class: Forum post
- 3-23 Changing behavior V (w/ guest Jennifer Tabanico)**
Due before class: Forum post; Campaign Development Project #3
Due Friday, 3-25: Personal Change #2
- 3-28 One-on-one proposal feedback with Ezra & Andrea**
Due before class: Conceptual Analysis #2
- 3-30 Phase 2 team time**
Due before class: Nothing
- 4-4 Scales of Change**
Due before class: Scales of Change essay
- 4-6 Storytelling for social change (w/ guest Beth Karlin)**
Due before class: Forum post
- 4-11 Phase 2 team time**
Due before class: Nothing
- 4-13 Thinking about the future (w/ guest Jill Kubit)**
Due before class: Forum post
Due Friday, 4-15: Personal Change #3
- 4-20 Navigating the apocalypse**
Due before class: Forum post
- 4-25 Ethics of behavior change**
Due before class: Ethics of Behavior Change assignment
- 4-27 Phase 2 team time**
Due before class: Nothing
- 5-2 Student presentations: Phase 2**
Due: Campaign Development Project #5
- 5-4 Wrap-up and visioning**
Nothing due

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- 5-9** ***NO CLASS (FINALS WEEK)***
Due 5-9: Campaign Development Project #6
Due 5-10: Campaign Development Project #7