Spring 2-1-2023

NRSM 574.01: Human Dimensions of Natural Resources

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NRSM 574 –Human Dimensions of Natural Resources

Spring 2023
T & Th 12:30 -1:50PM in 426 CHCB

Instructor

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Office hours: by appointment – please e-mail with windows of your availability

Course Description

Human Dimensions of Natural Resources (HDNR) provides an introduction to and understanding of how human cognitions and behaviors are related and shape our interactions and interrelationships with natural resources and the environment. Successful researchers and natural resource managers understand that humans and natural resources are systemically linked, each influencing the other through complex feedbacks. In this course, we examine the influence of cognitive, behavioral, and social forces on resource use and decision-making. Through course readings, discussion, and assignments, we explore how natural resource research and management is enhanced through integration of biophysical and social sciences. This course is interdisciplinary by design, focusing on human-environment dynamics associated with resource extraction, wildlife management, forestry, and private land ownership, and challenges students to consider alternate perspectives throughout. We establish the foundations of human dimensions by reviewing social science theory underlying HDNR approaches; explore methods and strategies for operationalizing theory in research and application; and critique the integration of human and biophysical dimensions in contemporary resource management issues and research.

Learning Goals

At the end of this course, students will:
- Appreciate the social (and ecological) complexity of natural resource issues
- Understand the importance of human dimensions to natural resource research and management
- Understand key social science concepts for investigating human dimensions, drawing from psychology, sociology, communication, behavioral science, behavioral economics, and systems approaches
- Understand the role of theory in HDNR research and management
- Be familiar with common theoretical approaches used in HDNR research and management
- Be able to articulate the value of integrating diverse perspectives in natural resource research and management

Learning Outcomes

Performance in NRSM 574 will be assessed based students' abilities to:
- Read, comprehend, represent, and critique human dimensions literature
- Offer insightful contributions to the discussion of human dimensions research
- Lead others in discussions of human dimensions theory
- Apply course material to contemporary natural resource issues, including their own research

Course Structure

This course will involve minimal lecture, frequent discussions, and regular assignments. Students are required to complete all required readings before class and be prepared for a lively discussion.

Readings and Required Texts

Heberlein, T. A. (2012). *Navigating environmental attitudes*. Oxford University Press: New York, 228p.

All other course readings will be posted on Moodle.

Assignments and Evaluation

Students will be evaluated based on performance across four areas:

1. **Preparation for class.** All students are expected to have thoughtfully prepared for each class period. This will generally involve thoroughly reading each article prior to class, listening to a podcast, or fulfilling other preparatory activities.

2. **Class attendance & participation.** As this course requires engagement from all students, it is important everyone attends and vigorously participates in each class discussion. Quality is valued over quantity.

3. **Facilitating discussion**. Each day, 1 student will independently prepare a handful of discussion questions (n~3) to facilitate our discussion of the day's content. Discussion questions should seek to inspire reflection, critique, or application of concepts and theories drawn from the readings, rather than pose knowledge-based or clarifying questions; in other words, they should inspire group discussion rather than static responses. Creativity is encouraged. Each student will prepare discussion questions and help facilitate discussion for approximately 3 class periods throughout the semester. Discussion questions should be submitted via e-mail to Dr. Metcalf before class and one copy brought to class on paper or electronically.

4. **Summary and review of a conservation behavior change study (in class presentation).** Students will prepare and present a 20-minute presentation of a conservation behavior change article of their choosing. Successful reviews will present relevant background to the conservation issue at focus, describe in detail the theoretical background and grounding of the authors' research question(s), and detail the methods, results, and conclusions before offering critiques, takeaways, and future research potential. Visuals are required, but medium is not dictated. Here, too, creativity is encouraged.

This class is offered for traditional letter grade only, it is not offered under the credit/no credit option. This course will be graded on the following scale: 93-100 (A), 90-92 (A-), 87-89 (B+), 83-86(B), 80-82 (B-), 77-79 (C+), 73-76 (C), 70-72 (C-), 60-69 (D), <60 (F).

Grades will be assigned according the following rubric:

- Preparation   30%
- Attendance & Participation   40
- Facilitating discussion   10
- Presentation   20
                              TOTAL: 100

Other Course Policies

- **Prompt attendance** is required by University policy. You are expected to join our class meeting on time and ready to participate at the start of the class period. If you must miss a class, please let me know via e-mail <u>in advance</u>. If you miss a class, it is your responsibility to review content and announcements with a classmate before approaching me with clarifying questions.
- If you are concerned about your grade, please communicate with me immediately. There is no extra credit in this course, but I am very willing to work with you to improve performance.
- I expect each of you to contribute actively to our learning environment. This goes beyond completing assignments and engaging in discussion and includes treating your instructors and fellow classmates with utmost care and respect.
- I expect you to ask questions, or for assistance, if needed.
- I expect you to be honest and demonstrate academic integrity. Please find and read the UM Student Conduct Code. Violations are serious.
- I expect you to be familiar with all UM polices including course drop deadlines (15th and 45th instructional day of the semester).

- All course assignments, announcements, and readings will be posted on our Moodle course page for easy reference from anywhere
- We will meet face to face in 426 CHCB unless COVID-19 transmission because untenably high at which point we will meet via Zoom or cancel class
- If you are unable to attend class in person (for health or other reasons), I can provide the opportunity to join remotely via Zoom. Early communication with me is necessary so I can prepare our technology for remote participation.

TENTATIVE Schedule and Topics

Week 1	Welcome, overview, institutional vs individual change
Week 2	Epistemology, ontology, axiology, and ways of knowing
Week 3	Origins and State of the Field
Week 4	Failed and Promising Approaches
Week 5	Human psychology, conservation behavior
Week 6	Elaboration Likelihood Model
Week 7	Cognitive hierarchy, values
Week 8	Environmental attitudes
Week 9	Theory of Planned Behavior
Week 10	Spring Break
Week 11	Descriptive, injunctive, and dynamic norms
Week 12	Transdisciplinarity
Week 13-14	Behavior Change Presentations
Week 15	Collective action theories
Week 16	Trust
Finals Week	*No final exam*