Course Description

Human Dimensions of Natural Resources (HDNR) provides an introduction to and understanding of human 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 shaping and influencing the other through complex feedbacks. In this course, we examine the influence of cognitive, behavioral, cultural, 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. 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, 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 PTRM 574 will be assessed based on students’ abilities to:

- Offer insightful contributions to the discussion of human dimensions research
- Communicate their knowledge of human dimensions perspectives in written and oral formats
- Partner with classmates to lead discussions
- Apply course material to a contemporary natural resource issue (e.g., their own research)
Course Structure

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

Readings and Required Texts

Three books are required for the course and can be obtained via the University Bookstore or a variety of online sources. All other course readings will be posted on Moodle. Citations for required readings:


Assignments and Evaluation

Students will be evaluated based on performance across four areas:

1. **Class participation and discussion.** This course depends on engaged discussion from all students. It is important each student prepares fully for each class by completing all required readings and preparing for discussion. Most weeks provide two days for discussion. For day one of each week (i.e., Mondays), students should come with 5 discussion questions inspired from the required readings (typed and printed). I will collect these questions and use them to help clarify understanding during discussion on day two (i.e., Wednesdays).

2. **Leading class discussion.** Students will partner with one classmate to lead discussion for one specific topic during the semester. Each team will lead discussion for one (1.0) hour of Monday’s class period. We will discuss additional roles and responsibilities for leading discussion in class.

3. **Reaction paper.** Students will independently write 2 reaction papers, which demonstrate critical thinking about course topics. Students can choose which course topics to focus their reaction papers. Each reaction paper should be 2 to 3 pages in length (double-spaced). Successful papers will succinctly summarize the topic and the various authors’ approaches in the required reading, plus one (1.0) additional article or reading. Successful papers will identify the main problem or issue common to the readings, restate authors’ central claims or contributions, identify strengths and/or weaknesses of those contributions, acknowledge the progression or interconnections among papers, and address why this line of research has been important to the HDNR field. We will discuss further guidelines for these papers in class.

4. **Group research proposal.** Students will work in small groups (approximately 3 people) to review a current natural resource issue and propose a future avenue of research which thoroughly engages and extends existing human dimensions literature. The paper will have a joint introduction and conclusion (written collaboratively) and one section of proposed research per group member (written individually). Paper length will depend on group size, but should
generally have a 2-4 page introduction, 10-15 page individual sections (each), and a 2-4 page conclusion (not including references, figures, or tables). Successful papers will have approximately 20 citations per individual section. Students are encouraged to use their thesis/dissertation topic to inform this assignment. Student groups will present research proposals during the final weeks of the semester. We will discuss further guidelines for this assignment in class.

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:

- General class participation: 25% (25 points)
- Leading class discussion: 10% (10 points)
- Reaction paper 1: 15% (15 points)
- Reaction paper 2: 15% (15 points)
- Final group paper: 25% (25 points)
- Final group presentation: 10% (10 points)

**TOTAL:** 100% (100 points)

Other Course Policies

- **Prompt attendance** is required by University policy. You are expected to arrive to class on time and ready to participate at the start of class. Please note classes now begin ON the half-hour (11:30AM). If you must miss a class, please let me know via e-mail in advance. If you miss a class, it is your responsibility to review content and announcements with a classmate.

- **Written assignments** must be typed, double-spaced, using normal fonts, and 1” margins. All in-text citations and reference lists must use the American Psychological Association (APA, 6th edition) style. The University Writing Center is an excellent resource for assistance with papers, including citation styles. A few useful links:
  - Writing Center link: http://www.umt.edu/writingcenter/
  - APA style link: http://www.apastyle.org/

- All assignments are due at the **beginning** of class on the due date (unless otherwise noted). **Late assignments** will lose 10% per day, starting on the due date, including weekends. After five days, late assignments will receive zero (0%) credit. Papers should be submitted as hard copies.

- 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.

- **Food** is allowed in class, but please be polite. Try to avoid odiferous ingredients, loud chewing or packaging, or items that might spill or otherwise cause disruption or damage.

- The University of Montana is a tobacco free campus – no tobacco items will be allowed in class, including smokeless/chewing tobacco, vaporizers, or e-cigarettes.
**Academic Integrity**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for online review at [Student Conduct Code Link: http://www.umt.edu/vpsa/policies/student_conduct.php](http://www.umt.edu/vpsa/policies/student_conduct.php). Plagiarism and cheating will not be tolerated; all violations will result in reduced credit for the assignment, zero credit for the assignment, zero-credit for the course, and/or reference to the Provost and Vice President for Academic Affairs.

**Tentative Course Schedule**

- **August 29**: Course Overview and Introduction
- **August 31**: Read and be prepared to discuss Orr (2004) part I; discussion dates set
- **September 5**: Labor Day – No Class
- **September 7**: Read, be prepared to discuss Orr (2004) parts II-IV
- **September 12**: Read, be prepared to discuss Section Ia and Firey (1999) chapters 1-5
- **September 14**: Read, be prepared to discuss Section Ib and Firey (1999) chapters 6-10
- **September 19**: Read, be prepared to discuss Section Iia; final groups formed
- **September 21**: Read, be prepared to discuss Section Iib
- **September 26**: Read, be prepared to discuss Section IIIa
- **September 28**: Read, be prepared to discuss Section IIIb
- **October 3**: Read, be prepared to discuss Section IVa and Heberline (2012) chapters 1-3
- **October 5**: Read, be prepared to discuss Section IVb and Heberline (2012) chapters 4-6
- **October 10**: Read, be prepared to discuss Section IVc and Heberline (2012) chapters 7-9
- **October 12**: Read, be prepared to discuss Section IVd and Heberline (2012) chapters 10-11
- **October 17**: Read, be prepared to discuss Section IVe
- **October 19**: Read, be prepared to discuss Section IVf
- **October 24**: Read, be prepared to discuss Section Va
- **October 26**: Read, be prepared to discuss Section Vb
- **October 31**: Read, be prepared to discuss Section Viia
- **November 2**: Read, be prepared to discuss Section VIib
- **November 7**: Read, be prepared to discuss Section VIIa (VOTE TOMORROW)
- **November 9**: Read, be prepared to discuss Section VIIb
- **November 14**: Veterans Day – No Class
- **November 16**: Read, be prepared to discuss Section VIII
- **November 21**: Read, be prepared to discuss Section IX
- **November 23**: Thanksgiving Travel Day – No Class
- **November 28**: Read, be prepared to discuss Section Xa
- **November 30**: Read, be prepared to discuss Section Xb
- **December 5**: Read, be prepared to discuss Section Xla
- **December 7**: Read, be prepared to discuss Section Xlb
- **December 12**: Presentations
- **December 14**: 8:00AM – 10:00AM Final Exam
Human Dimensions of Natural Resources Reading List, Fall 2016

Reading are listed alphabetically, but you may want to read them chronologically for a better understanding of the material and subject discourse.

*Readings with an asterisk are optional.

Section I  Human Dimensions Introduction and Overview

Section Ia


Section Ib


Section II Transdisciplinary Approaches

Section IIa


**Section IIb**


**Section III**  
**The Commons: Foundations and Extensions**

**Section IIIa**


**Section IIIb**


McKibben, B. (2011). How we’ve proved the “Tragedy of the Commons” wrong. YES! Magazine http://www.alternet.org/story/149600/how_we%27ve_proved_the_%22tragedy_of_the_commons%22_wrong


**Section IV**  
**Social-Psychological Approaches**

**Section IVa  
Values (read this section in order presented)**


**Section IVb  
Value Orientations & Normative Approaches**


**Section IVc The Reasoned Action Approach**


**Section IVd Applications**


Section IVe Changing Behavior


Section IVf Behavior and Communication


Section V Human Dimensions of Wildlife

Section Va


Section Vb


Teel et al. 2010. Understanding the cognitive basis for human-wildlife relationships as a key to successful protected-area management. *International Journal of Sociology* 40(3):104-123.


Section VI  Community and Place

Section VIa  Community


**Section VIb  Place**


*Stedman, R. C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society & Natural Resources*, 16(8), 671-685.


**Section VII  Social-Ecological Systems**

**Section VIIa**


**Section VIIb**


**Section VIII Stakeholder Involvement and Collaboration**


**Section IX**  
**Issues of Scale and Aggregation**


**Section X**  
**Trust and Reciprocity**

**Section Xa**


Section Xb


Section XI Social and Environmental Justice

Section Xla Environmental Justice and Poverty


**Section XIb Social Justice**


