Course Description

Biologically oriented conventions of fisheries and wildlife (FW) conservation and management don’t fully address the diverse range of FW-related values and value conflicts expressed in contemporary society. How do people value fisheries and wildlife, how do they want FW to be conserved and managed, how do they affect or are affected by FW conservation and management decisions? The human dimensions (HD) field seeks to understand human traits and looks at ways to incorporate that understanding into conservation and management conservation planning and action. The application of this insight is relevant to all environmental fields.

This 3-credit graduate course examines theory and research related to human dimensions of FW conservation and management. The development and evolution of the HD field has been driven in large part by controversy and complexity; HD inquiry is usually a reaction and desire to avoid problems. Often, HD studies have been used in last-ditch efforts to direct action after issues have heated up, and involve experience with problems and the quest for solutions to those problems. However, there is an increasing recognition within the FW management and conservation fields that HD studies may provide insight that help preempt controversy and conflict.

We will use case studies to illustrate various applications of multidisciplinary theory and effects of conservation and management strategies. Course meetings may include short lectures, collaborative and cooperative learning exercises, class and peer-led discussions, and computer simulations.

Course Objectives

By the end of the semester, students should be:

1) familiar with the major ideas and practices related to HD, including economic and social values, individual, group, and social behavior, public involvement, decision making, risk, and communication;
2) able to integrate human and biological dimensions within a management context;
3) able to incorporate concepts of HD research into their professional activities, recognizing their philosophy of science;
4) critically create, evaluate and apply HD-research; and
5) be aware of opportunities to proactively (i.e., descriptively) and reactively (i.e., prescriptively) use HD information to preempt controversy.

**Required Readings**

We will use the ANGEL online course management system for posting of readings, assignments, and grades. ANGEL can be accessed via [www.angel.msu.edu](http://www.angel.msu.edu).

Each week, students are responsible for the readings listed. These articles (and occasional book chapters) are available online at the ANGEL course website. In addition to required reading assigned by me, there will be supplemental readings (see below) assigned by you. I will provide additional, optional, readings on all topics discussed on class for additional reference and information.

**Course Requirements**

**Assignments:** Class assignments are designed to meet course objectives.

**HD Research Methods:** To allow you to gain greater familiarity with the diversity of HD research methods, you will be required to write two brief (3-5 pgs) papers on two different HD research methods (or two different mix-method applications). One paper must address quantitative methods and the other qualitative methods. To facilitate information sharing and improved writing skills, peers will critique and support arguments presented in your paper before you submit it to me. Your constructive critique and support of your peers’ work will count towards your class participation grade.

**Final Exam:** A final, oral, exam will be given the last day of class. Students will be provided with human and biological information about a real-world case study. Each case study group will be required to participate in a mock “commission-style” meeting where they will be asked to: analyze, interpret, synthesize, discuss, and identify limitations associated with HD information about their case study as well as integrate the human and biological dimensions of the case study. Your constructive critique and support of your peers’ work will count towards your class participation grade. More details about the exam will be discussed in class.

**Classroom Participation:** Given our course meets only once a week, you will be asked to read a considerable amount of original or in-depth material before the class for which it is assigned so you can discuss it during that class. Attendance is crucial for a seminar’s success; you cannot participate if you do not attend. Along these lines, throughout the course, you will be expected to contribute your experiences, opinions, and questions to the discussions. The diversity of our class will welcome different perspectives and needs.

**Supplemental Readings:** In addition to weekly participation, each student will be responsible for one class during the semester when s/he provides a supplemental reading to the readings already listed. Students will identify a reading related to that week’s readings and then facilitate a short (10-15
minute) discussion in class. When presenting these readings, students will need to prepare an abstract and an outline of important issues from the readings. Students will have the opportunity to sign up for a supplemental reading during the first week of class.

Midterm evaluation: Each student will be asked to provide thoughtful and constructive feedback about the course and factors facilitating or inhibiting their learning in the course midway through the semester. This formative evaluation is designed to determine navigational problems and identify strengths or weaknesses with the course so that adjustments may be made to benefit the class. This evaluation will count towards your class participation grade.

Grading: I will use rubrics to grade all assignments and will share grading criteria with you before the assignment is due. Overall, your grade will be based on:

- Classroom participation: 25%
- Methods papers: 40% (20% each)
- Final exam: 35%

Course Policy

Format of written work: You should adhere to a publication manual for citation of sources in your written work. You may already be familiar with a certain style of citation, in which case you may use the style with which you are most familiar. If you are not currently using a particular style, I recommend using the *Publication Manual of the American Psychological Association (APA)* 5th Edition. Proofread your written work carefully. Errors in spelling, format, grammar, and clarity of thought will affect the grading of all written work, as will failure to cite sources appropriately. I highly recommend you purchase Shrunk and White’s “*The Elements of Style*” to help improve your writing, in this class and beyond.

Submission of assignments: ALL written assignments must be turned in electronically via ANGEL by midnight of the due date. Students are responsible for ensuring files are uploaded properly and in a timely fashion to the ANGEL website. Please familiarize yourself with the ANGEL website for this course.

Due dates: Assignments are due by midnight on the date listed. No late papers will be accepted without a valid University excuse. MSU’s excuse policy can be found at [www.msu.edu/unit/ombud/excuses.html](http://www.msu.edu/unit/ombud/excuses.html).

Accommodations: If you need an accommodation based on the effect of a disability, you should contact me as soon as possible. I utilize the services of MSU’s Resource Center for Persons with Disabilities (www.rcpd.msu.edu) to verify the need for accommodations and to develop an appropriate accommodation strategy.

Academic dishonesty: Academic honesty is fundamental to the activities and principles of the university. The academic community regards academic dishonesty as an extremely serious matter, with serious consequences. When in doubt about plagiarism, paraphrasing, quoting, or collaboration
consult me for guidance. To learn more about plagiarism and how to avoid it, visit www.library.ualberta.ca/guides/plagiarism.

Course Schedule of Topics, Readings, and Assignments

This is a tentative schedule for the semester, and I’ve allotted some room for flexibility. We may fall behind or move ahead from time to time, so revisions will be announced in class. Please keep up with these revisions.

<table>
<thead>
<tr>
<th>Date &amp; General Topic</th>
<th>Draft Agenda, Assignments, Readings</th>
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| **August 27:** Introductory session | • Discussion of course objectives, prof/student expectations, housekeeping  
• Resource needs assessment  
• Mini-lecture: The Nature of Science: ontology and epistemology  
• Perception Activity: view basketball video  
• Assignment: Email me article/citation to be read for your week (PDF or link). Due 9/3.  
**Readings:**  
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity and Readings</th>
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<tr>
<td><strong>September 3</strong></td>
<td>NO CLASS (LABOR DAY)</td>
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<td><strong>September 10:</strong></td>
<td>Integrating human and biological dimensions</td>
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<td>Objectives: 1) understand approaches for integrating HD and BD; 2) discuss challenges</td>
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<td>and opportunities for integrating HD</td>
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<td></td>
<td>• Mini-lecture and Discussion: The Public Trust Doctrine and North American Model of</td>
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<td>Wildlife Management: defined and applied</td>
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<td>• Student led discussion: Nick Reo and Neil Carter</td>
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<td>Readings:</td>
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<td></td>
<td>in adaptive management of wildlife-related impacts.&quot; Wildlife Society Bulletin</td>
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<td>34(3): 698 - 705.</td>
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<td>for evaluating the effects of human factors on wildlife habitat: the case of giant</td>
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<td><strong>September 17:</strong></td>
<td>What does human dimensions measure?</td>
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<td>Objectives: 1) identify key conceptual frameworks; 2) understand link b/w theory and</td>
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<td>application (goal: appreciate theory-based research)</td>
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<td>• Mini-lecture and Discussion: Common conceptual frameworks in human dimensions</td>
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<td>research (see notes from Ch. 2 handout---Basic comments about HD</td>
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<td>• Student led discussion: Cecilia Lewis</td>
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<td>Readings:</td>
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<td>graphic approach to practical significance of human dimensions research.&quot; Human</td>
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<td>Arlinghaus, Robert. 2006. Overcoming human obstacles to conservation of recreational</td>
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<td>fishery resources, with emphasis on central Europe. ENVIRONMENTAL CONSERVATION 33 (1):</td>
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<td>46-59.</td>
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<td><strong>September 24:</strong></td>
<td>Quantitative measurement:</td>
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<td>Objectives: 1) understand key methods for</td>
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<td>• Mini-lecture and Discussion: Matching method to context and concept</td>
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<td>• Student led discussion: Marisa Rinkus</td>
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<td>• Activity: Concept/question matrix construction and instrument dissection</td>
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<td>Readings:</td>
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Objective: 1) understand key methods for qualitative measurement; 2) be able to apply methods; 3) judge value of methods using standards and criteria

October 1: Qualitative measurement

- Housekeeping: Method 1 Paper Assignment
- Mini-lecture and Discussion:
- No student led discussion
- Assignment: Method 1 paper due to peers for review. Due 10/8.

Readings:


October 8: Considerations for measurement

Objective: apply understanding about confounding issues in measurement, strategies to overcome, and implications of error

- Due to peers: Method 1 Paper
- Mini-lecture and Discussion:
- Student led discussion: Marc Verhougstraete
- Activity: concentric circles—what is a problem associated with method x and what is a possible solution
- Assignment: Method 1 paper returned to author. Due 10/15.

Readings:


**Objective:** 1) understand who effects and is affected by management?; 2) apply stakeholder characterization and identification  

- Due to author: Method 1 Paper  
- Mini-lecture and Discussion: what/who is a stakeholder; opportunities and challenges with constituent groups  
- Student led discussion: Jody Simoes  
- Activity: Paper discussion with critique and support groups  
- Assignment: Method 1 paper. Due 10/22.  

**Readings:**  


**Objective:** 1) understand how to operationalize stakeholder involvement  

- Due: Method 1 Paper  
- Mini-lecture and Discussion:  
- Student led discussion: Ryan Theiler  

**Readings:**  


### October 29:
**Stakeholder involvement**

Objective: discuss utility of and obligation to conduct stakeholder involvement

- Mini-lecture and Discussion:
- Student led discussion: Bret Muter
- Activity: Mock debate: to involve or not to involve—is there a question???

**Readings:**


### November 5: Citizen participation

Objectives: 1) understand what/why/hows associated with CP and apply suitable strategies to different approaches to CP

- Housekeeping: Method 2 Paper Assignment
- Mini-lecture and Discussion: Spectrum of public participation and evaluation
- Student led discussion: Dori Pynnonen-Valdez
- Assignment: Method 2 paper due to peers for review. Due 11/12.

**Readings:**


### November 12:
**Application of HD-communication, outreach, education**

Objectives: 1) understand and evaluate challenges and opportunities associated with

- Due to peers: Method 2 Paper
- Mini-lecture and Discussion: Communication: prescriptive or descriptive
- Student led discussion: Lissy Goralnik
- Activity: Black bear management computer simulation
- Assignment: Method 2 paper to author. Due 11/19.

**Readings:**
Eschenfelder, K. R. (2006). "What information should state wildlife agencies provide on their CWD websites?" *Human Dimensions of*
| Objectives: 1) challenge assumptions associated with integration of HD and BD |   |
|   | • Due to author: Method 2 Paper  
• Mini-lecture and Discussion:  
• Student led discussion: Amy Smith  
• Activity: Paper discussion with critique and support groups  
• Assignment: Method 2 paper. Due 11/26. |
Becker (1998). *Tricks of the trade: how to think about your research while you are doing it.* Chicago, IL, University of Chicago Press.  
| November 26: Review class and what will the future bring? |   |
| Objectives: 1) analyze methods/case studies discussed over course of semester; 2) judge value of methods using standards and criteria | • Due: Method 2 Paper  
• Housekeeping: final exam  
• Mini-lecture and Discussion: TBA  
• Activity: Compare case studies/methods, evaluation |
| December 3: | **FINAL EXAM** (during normal class meeting) |
| this semester |  |