COURSE DESCRIPTION:
Wildlife conservation and management are inherently political issues because they entail societal values as well as science. But just what are the appropriate relationships between science and politics or professionals and the public in the realm of wildlife conservation? Among wildlife biologists, the appropriate relationship between science and policy often is viewed in terms of a unidirectional flow of influence in which science is used to generate sound wildlife policy. When influence flows in the opposite direction, concerns about advocacy and inappropriate politicization of science are quickly raised. However, recent years have seen a flow from policy to science in the reverse; that is, in terms of legislative and administrative mandates for the conduct of science. These include the Shelby Amendment in 1999, the Data Quality Act of 2001, and the Federal Policy on Research Misconduct. Beyond this, the last 30 years have seen a dramatic growth in litigation related to wildlife conservation. Concurrently there has been a growth in the number of wildlife management issues addressed through ballot initiatives rather than more traditional policy processes. The relationships among politics, science, wildlife professionals, the courts, and society are dynamic and ever changing. Effective wildlife conservation in the future will require an understanding of both the history and emerging trends in these types of policy and political issues.

While no one course can provide the comprehensive understanding necessary to effectively participate in these processes, this course seeks to build a foundation on which to begin constructing an understanding of the social and political processes relevant to contemporary wildlife policy and biopolitics. The course emphasizes analysis of contemporary court cases related to wildlife conservation. Case law is an arena in which legislative directives, agency interpretation and implementation, science, and social conflict resolution come together in a single, relatively compact, publicly observable forum. Therefore, case law provides a unique opportunity to study and understand policy as the dynamic, interpretive, and constantly evolving process underlying wildlife conservation and management it actually is (rather than as the distant, dry, dusty, and irrelevant history it is sometimes perceived to be).

The cases used in class emphasize three broad areas of policy and social conflict: (1) wolf reintroduction, management, and delisting in Idaho, Wyoming, and Montana; (2) the nature of science, the question of professional expertise, and the balance of power in wildlife management; and (3) the politics of out of state hunting licenses. Beyond these broad themes, the cases also
reflect and provide a spring board for discussing fundamental social/political concepts in wildlife conservation and management our society is constantly debating. Examples of these debates include questions such as: (1) what is the nature of an individual’s legal rights with respect to wildlife; (2) what is the extent of discretion governmental wildlife agencies have in decision making under our current legal system; (3) what is the appropriate relationship among wildlife agencies, the courts, and the public in governance of wildlife management; (4) what is the appropriate role of science in decision making related to wildlife conservation; (5) who gets to define what counts as science and how has this been changing in recent years; and (6) what does the language used in NEPA and the ESA really mean?

The final section of the course deals with the question: “How should society make collective decisions about the policies that guide conservation and management of wildlife?” It explores different models and philosophies of decision-making and conflict resolution.

Required texts:
There is no textbook for this course. Assigned readings will be made available on the library's E-reserve (http://eres.lib.umt.edu/eres) systems; password = wbio410. Readings not available in digital format will also be placed on the library’s traditional reserve system. Also check the E-reserve system for assignments, announcements, and updates (e.g., clarifications to assignments).

TEACHING/LEARNING PHILOSOPHY:
There are no prerequisites for this course other than an interest in the subject; senior level reading, analysis, and writing skills; plus a willingness to participate actively in your own education. And please note, this is not an over-view or introductory course. First, the material covered in the class is difficult – that is the nature of policy and politics and this course seeks to provide a realistic exposure to these topics. Second, this is a senior level class designed for "majors" and I have high expectations about the level of effort and quality of work that goes with a course of this nature.

The course emphasizes critical thinking skills such as analysis, evaluation, synthesis, and integration across readings/discussion topics rather than simple memorization of facts and dates. Wildlife conservation is an interdisciplinary profession. As a consequence it is not adequate simply to develop expertise in a single area or subfield (like biology or genetics). The various disciplines that are integral to the success or failure of wildlife conservation often employ very different approaches to problem solving, demand different modes of thinking, and utilize different communication styles. Throughout this course, rather than being critical of (or frustrated by) these differences, you should see one of your learning goals as developing the ability to understand the different ways of thinking inherent in other disciplines (such as law, policy science, and social science). And beyond this class, adopting this perspective will help you more effectively achieve wildlife conservation goals in your professional future.

Though I consider myself very "applied" in terms of my wildlife conservation interests, those students looking for “the answers” to political, policy, and social problems associated with wildlife conservation will not find them explicitly laid out in this course. Bear in mind that I do not expect you to have found the answer or to have mastered these issues by the end of this
course. It is my belief this reflects real life. There is no final answer to any but the most simplistic problems. In fact, wildlife researchers and managers spend most of their lives trying to better define the questions and problems while working with the knowledge at hand. Therefore, major goals of the course are to introduce different ways of thinking and problem solving and to provide you a foundation on which to continue to develop a greater understanding of wildlife policy and biopolitics and their implications for wildlife conservation and management. From this understanding you will be able to better define problems and generate solutions as they come up in your professional life. Remember: life is not a quiz show; wildlife professionals are not hired because they know the answers, but because they can define problems and generate solutions. (With thanks to my mentor Dan Williams for this perspective.)

What you get out of a class depends to a large extent on what you put into it. Learning is an active process. it occurs most readily when you are a participant throughout rather than a spectator or “night before the exam crammer”. I expect you to do every reading assigned for the course before you come to that class. There are different levels at which one can potentially do the readings: (1) reading to be familiar with what the author says; (2) reading to analyze and interpret what the author says (every reading assigned has a deeper message than just the "facts and dates" presented); and (3) reading critically to critique what the author says, synthesizing/integrating this reading with previous readings/class discussions, and finding something to say about the reading in a discussion. I expect you to read at all three levels. To accomplish this you should do readings well ahead of time; underline or highlight key points; and review these highlights an additional time before class, making notes of the key points, things worth discussing, and links to topics being covered in the class. If you fall behind, the material will overwhelm you.

COURSE POLICIES

CLASS PARTICIPATION: 25% I will provide ample opportunities for class discussion on a regular basis. A discussion provides you the opportunity to explore issues you find confusing, which is important given the complexity of political and social processes in our society - answers often are not black and white. I encourage you to use class discussions to clarify confusing issues, to test your understanding, and to contribute to your classmates’ (and my) education by sharing your insights about the material. If you feel a given day’s class discussion did not provide you the opportunity to participate and/or to demonstrate your knowledge of the material, let me know immediately after class on that day.

The first aspect of participation is being present (my definition of present for grading purposes is in class on time and there for the whole period). But being present is a necessary but not sufficient condition for your class participation grade. Getting credit for participation also depends on three criteria: (1) the extent to which you actively participate in the class discussions, (2) the extent to which you demonstrate to me that you consistently read and thought about the assigned materials, and (3) the extent to which your comments are relevant to the focus of the discussion.

To get an “A–” for participation, you need to be present (in class on-time) and to contribute meaningfully to the discussion no less than 85% of the days during which there is a class discussion. In other words, you can have some absences or otherwise not contribute for a
portion of the discussion days and still receive an A. But choose those days wisely – leave room for illness or other personal emergencies (that is, the “85%” standard is there primarily to accommodate these sorts of occurrences). For a B– you need to participate no less than 75% of the days.

If necessary (due to lack of participation or apparent lack of familiarity with the readings) I will also use unscheduled in-class quizzes or exercises to assess preparation and these will be factored in to the grade. You may check with me on how you are doing at any point.

**EXAMS/ESSAYS: 75%** There will be at least 3 primary exams/essays. The essays will be short (4-6 pages in length). But *do not let their brevity fool you*. I will be looking for critical thinking, the ability to integrate and demonstrate an understanding of material we have covered in class, and the quality of writing one would expect from seniors in college – put careful thought into their completion. Essays that serve as an exam are to be done independently, copying another student’s essay in whole or part is a form of academic misconduct.

**LATE POLICY:** All assignments are due at the **BEGINNING** of class on the specified due date. Missing classes in the preceding week is **NOT** an acceptable reason for failing to complete assignments. Missing class on the due date is **NOT** an excuse for failing to turn in the assignment unless there is a serious personal emergency. Should you encounter situations that affect your ability to complete assignments, make me aware of the situation in as timely a manner as the circumstances allow. Late assignments without a timely and acceptable explanation will be penalized 10% per day.

**Upper Division Writing**
This course is one of three courses needed to satisfy the upper division writing requirement for CFC majors. Each student is required to achieve satisfactory scores on a sophomore-level writing course (FOR 220/WBIO 245 or equivalent). The successful completion of one of these courses plus the writing proficiency exam will be prerequisites for completion of the upper division distributed writing requirement.

Assessment of student writing will be on the basis of the following criteria:
1. A clear statement of purpose (hypothesis or question or goal) within the scientific context of the specific discipline.
2. The development of effective logical arguments using evidence and/or theory from the discipline or supporting disciplines.
3. Writing meets discipline-specific writing conventions including the proper citation of sources of information.
4. Demonstrate appropriate English language usage.

**Grading Scale:** See separate handout posted on e-reserve.

**Syllabus Statements Mandated by Academic Officers of The University of Montana**
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 review online at http://ordway.umt.edu/SA/VPSA/index.cfm/name/StudentConductCode
Class Schedule: Wildlife Policy and BioPolitics
Profession Responsibility to the Public for the Public

1) Course Introduction & Policy fundamentals I
   a. Case Discussions = When Animals Attack, Are Wildlife Biologists Legally Liable?
   b. Date: August 26

2) Course Introduction & Policy fundamentals
   a. Read 2 case summaries: Alligator Attack & Yellowstone Moose Attack MS Word File posted on e-reserve
   b. Date: August 28

Courting the Wolf

3) Wolf Reintroduction in Yellowstone - the Question of Standing (From Wyoming Farm Bureau Federation v Babbitt, Federal District Court, District of Wyoming, 1997)
   b. Tentative Date: September 2

4) Wolf Reintroduction in Yellowstone - the Merits of the Case 1
   a. Read: Wolf Reintroduction Merits 1. MS Word File
   b. Tentative Date: September 4

5) Yellowstone and Wolf Reintroduction - the Merits of the Case 2
   a. Read: Wolf Reintroduction – Merits 2
   a. Tentative Date: September 9

6) In the Line of Duty: Can US FWS Employees Litter Wolves Across State Landscapes?
   a. Read: State of Wyoming v Livingston and Jimenez, 43 F.3d 1211 (10th Circuit Court, 2006)
   b. Tentative Date: September 11

7) Turning Wolf Management Back to the States? Case I
   b. Tentative Date: September 16

8) Essay Exam Assignment 1: Turning Wolf Management Back to the States? Case II: Discussion Day (Due Tuesday September 23 by 5 PM)
   a. Read: Defenders of Wildlife v Hall (Federal District Court, District of Wyoming, 2008)
   b. Tentative Date: September 18
9) **Essay Exam Assignment 1**: Turning Wolf Management Back to the States? Case II: Get it Done Day (Due Date)
   a. Read: This will be an open day (no class) to work on the essay exam
   b. Tentative Date: September 23 **Essay Due by 5 PM**

**Law, Politics, and Science: Strange or Intimate Bedfellows?**

10) Policy for Science – Government Oversight of Science Good, Bad, Indifferent? OMB, GAO, Data Quality Act, etc.
   b. Tentative Date: September 25

11) Science in the Court: Florida Panthers and the FWS’s Biological Opinion
   b. Tentative Date: September 30

12) Wildlife Biologists look at the Florida Panther Science
   b. Tentative Date: October 2

13) Politics and Science in the Court: Whaling and an Agency’s Environmental Assessment
   a. Read: Metcalf v Daley (9th Circuit Court of Appeals, 2000)
   b. Tentative Date: October 9

14) What is objectivity?
   b. Tentative Date: October 7

15) Monkeys, Scopes, and Dauberts – The Court and Kansas Attempt to Define Science
   a. Read: The Court defines Science (extracts from 3 court cases)
   b. Tentative Date: October 14

16) Just What is this Thing Called Science?
17) Does Good Scientific Knowledge Meet the Requirements for Good Managerial Knowledge?

   b. Tentative Date October 21

18) Essay Exam Assignment 2: How much deference to agency expertise? The Newest En Banc: Discussion Day (Due Thursday October 28 by 5 PM)

   b. Tentative Date: October 23

19) Essay Exam Assignment 2: How much deference to agency expertise? The Newest En Banc: Get it Done Day (Due Date)

   a. Read: This will be an open day (no class) to work on the essay exam
   b. Tentative Date: October 28 Essay Due by 5 PM

   *Hunting Politics*

20) States or United States - Montana, Elk Hunting, and Discrimination? I

   b. Tentative Date: October 30

Election Day Holiday November 4 (a chance to make your choices)

21) States or United States - Montana, Elk Hunting, and Discrimination?

   a. Read: Baldwin v. Montana Fish and Game Commission (continued)
   b. Tentative Date: November 6

Veteran’s Day Holiday November 11 (a chance to remember service)

22) Arizona – Hunting and Discrimination II

   a. Read: Montoya v Shroufe  (Federal District Court, District of Arizona, 2004)
   b. Tentative Date: November 13
23) Minnesota - Hunting, Discrimination III, and Consistency Across Jurisdictions
   a. Read: Minnesota v Hoeven - 456 F.3d 826; (8th Circuit, 2006)
   b. Tentative Date: November 18

   **Conflicts: From Courts to Collaboration**

   b. Tentative Date: November 20

25) Urban Deer Conflict
   a. Read: Excerpts from 2 interviews
   b. Tentative Date: November 25

Thanksgiving Holiday November 27

26) Design of Collaborative Groups - A 2nd Wildlife Example
   b. Tentative Date: December 2

27) Collaboration Wrap up/Final Exam Set up
   a. Read: Appendix 13 of the Draft EIS for Grizzly Bear Reintroduction
   b. Tentative Date: December 4

28) Final Exam
   a. Wednesday December 10 3:20-5:20