

**Instructor: Lisa Eby**

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Office hours: Monday 2:30-3:30pm, Wednesday 1:30-2:30, Thursday 4-5pm, or by appointment (email)

**Course description:**

Fisheries management consists of three interrelated processes: fish populations, fish habitat, and people. This course introduces some of the fundamental principles and approaches of inland fisheries ecology and management. Through general readings and specific case studies we will explore the challenges of balancing multiple human values in managing fisheries resources. We will focus on understanding

1. The drivers of change in fish populations,
2. Quantitative nature of fish population assessment,
3. Fish habitat requirements, impacts, and restoration,
4. Harvest and other social/economic value of fisheries,
5. Complexity of ecological interactions linking fish to other components of aquatic ecosystems and broader social community.

This course, in combination with 2 others, fulfills the upper division writing requirement for Wildlife Biology majors. The UM upper-division writing requirement includes: (1) Identify and pursue more sophisticated questions for academic inquiry, (2) Find, evaluate, analyze, and synthesize information effectively from diverse sources, (3) Manage multiple perspectives as appropriate, (4) Recognize the purposes and needs of discipline-specific audiences and adopt the academic voice necessary for the chosen discipline, (5) Use multiple drafts, revision, and editing in conducting inquiry and preparing written work, (6) Follow the conventions of citation, documentation, and formal presentation appropriate to that discipline, and (7) Develop competence in information technology and digital literacy.

Textbook: All readings will be on Moodle. A good text is: Hubert and Quist (eds). 2010. Inland Fisheries Management in North America. American Fisheries Society. 3<sup>rd</sup> edition. American Fisheries Society, Bethesda, Maryland. You can buy this book through AFS (with member discount).

Grading policy:

**Proposal**

***Short paragraph of idea due by March 6<sup>th</sup>, full proposal due April 3<sup>rd</sup>, panel discussion on April 17<sup>th</sup> (reviews due), and revision due May 1<sup>st</sup>***

Paragraph of idea should include a description of the general issue/s (why care?), specific question to be addressed with the proposed work, where the study may take place, and what type of methods you may use to address the questions.

**Proposals (15% of your grade)** should be no longer than ten pages, including figures, tables, and a brief resume (1 page) of the principal investigator. The following information must be provided: (a) Principal Investigator name & affiliation; (b) Title of project; (c) Description of

project: this section should include a brief introduction to the problem, your specific objectives, your study plan; (d) Expected benefit/results of project to fish management; (e) Proposed project schedule and timeframe (not longer than 2 years for the entire project); (f) Biographical information. Each person must provide a brief resume summarizing his/her qualifications and experience; (g) Budget Table (no more than \$75,000 for the two years), you need to include salary (# people, # days, hourly pay), fringe (12% of salary for people you employ less than 6 months, 30% of salary for people you employ for longer), supplies needed to perform the project, travel (\$0.42/mile and any per diem), equipment use or rental (boat days, etc.), and equipment repair. Turn in 3 copies of your proposal.

Reviewing 2 proposals will be an assignment. Proposals will be evaluated on organization, writing, scientific/technical merit, feasibility, and benefits to fisheries management. Review sheets will be provided. Students will have a week to complete the review and turn it in at the panel discussion evaluating which proposals will be funded. I will also comment on drafts for the final version. *The proposal grades are based on grading rubric not on whether your proposal gets funded.*

### **Assignments (60%)**

Computational and written assignments will be passed out in class throughout the semester. There will be computational assignments associated with each case study. There are multiple assignments (as listed in syllabus). Students are free to discuss results, but all components of the assignments must be prepared individually. *All written material, calculations and graphs to be handed in must be your own work (answers must be in your own words). If you plagiarize, you will get a zero for the assignment. A second infraction will result in failing the course. A 5% per day late penalty will be assessed unless prior arrangements are made.*

### **Participation and Discussions (15%)**

Come to class with readings complete and ready to participate in class (10%).

Professional and Scientific Exposure (5%): You will have a choice to participate in multiple potential activities this spring. Go to the AFS meeting for ½ day, or 5 public seminars related to aquatic issues (AFS Chapter sponsored talks that are **not** required for class, WBIO, IoE, Wilderness lecture series, DECS, or OBE seminars), or public meetings associated with MFWP aquatic issues (<http://fwp.mt.gov/> and in the newspaper). Please get approval ahead of time. To document this activity, you must write 1 paragraph summarizing each seminar (objective, approach, findings, and implications) or for a public meeting (summary of issue, concerns by citizens, next step in process). Please turn it in **within 1 week** of the seminar or meeting. As seminar schedules are completed, I will announce them in class. Do not wait until the last week of the semester; you will need to make progress on this throughout the semester.

**Exam (10%):** The final exam for this course will review the major concepts that were covered during the entire semester. I will make previous final exams available.

### **Class Schedule:**

Please go to moodle for the weekly schedule of topics, readings and assignments.

### **UM / Course Policies:**

### Students with Disabilities Statement

○ The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you have a disability that adversely affects your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

### Student Conduct Code Statement

○ 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](#).

### Course Withdrawal Deadlines Statement

- See also [Spring 2020 Important Dates and Deadlines](#) calendar (select Spring tab)
- Including this information on your syllabus helps students make decisions in a timely manner and helps avoid end of the semester student frustration. Recently there has been an upswing of student requests to drop classes the last 2 weeks of the semester for reasons that do not fit “very limited and unusual circumstances” required after the 45<sup>th</sup> instructional day. Inclusion of the following information in syllabi by FCFC faculty is therefore much appreciated.

### Important Dates Restricting Opportunities to Drop a Course Spring 2019:

Deadline	Description	Date
To 15 <sup>th</sup> instructional day	Students can drop classes on CyberBear with refund & no “W” on Transcript, last day to change to Audit	February 3, @5 PM
16 <sup>th</sup> to 45 <sup>th</sup> instructional day	A class drop requires a form with instructor and advisor signature, a \$10 fee from registrar’s office, student will receive a ‘W’ on transcript, no refund.	February 4 – March 24 @5 PM
Beginning 46 <sup>th</sup> instructional day	<b><u>Students are only allowed to drop a class under very limited and unusual circumstances.</u></b> Not doing well in the class, deciding you are concerned about how the class grade might affect your GPA, deciding you did not want to take the class after all, switching majors, and similar reasons are not among those limited and unusual circumstances. If you want to drop the class for these sorts of reasons, make sure you do so by the end of the 45 <sup>th</sup> instructional day of the semester. Requests to drop must be signed by the instructor, advisor, and Associate Dean (in that order) so if you pursue this request, <b>leave sufficient time to schedule meetings with each of these individuals</b> (generally this will take at least 3-5 working days). A \$10 fee applies if approved. Instructors must indicate whether the individual is Passing or Failing the class at the time of request.	March 25 – May 1 @5 PM

### **Class Attendance Policies: Some key points:**

- Students who are registered for a course but do not attend the first two class meetings may be required by the instructor to drop the course. Students not allowed to remain must complete a drop form or drop the course through CyberBear to avoid receiving a failing grade. Students who know they will be absent should contact the instructor in advance.
- Students are expected to attend all class meetings and complete all assignments for courses in which they are enrolled. Instructors are encouraged to notify advisors or the appropriate administrators regarding students with excessive unexcused absences. Instructors **may excuse** brief and occasional absences for reasons of illness, injury, family emergency, religious observance, cultural or ceremonial events, or participation in a University sponsored activity. (University sponsored activities include for example, field trips, ASUM service, music or drama performances, and intercollegiate athletics.)
- **Cultural or ceremonial leave allows excused absences for cultural, religious, and ceremonial purposes to meet the student's customs and traditions or to participate in related activities.** To receive an authorized absence for a cultural, religious or ceremonial event the student or their advisor (proxy) must submit a formal written request to the instructor. This must include a brief description (with inclusive dates) of the cultural event or ceremony and the importance of the student's attendance or participation. **Authorization for the absence is subject to approval by the instructor. Appeals may be made to the Chair, Dean or Provost.** The excused absence or leave may not exceed five academic calendar days (not including weekends or holidays). Students remain responsible for completion or make-up of assignments as defined in the syllabus, at the discretion of the instructor.
- Instructors **shall excuse** absences for reasons of military service or mandatory public service.
- See the accompanying "Faculty/Instructor Reference and Referral Guide" document for Title IX requirements regarding attendance questions in relation to a pregnancy.
- Instructors may establish absence policies to conform to the educational goals and requirements of their courses with due consideration of the class's diversity. **Such policies should be set out in the course syllabus and should include the procedures for giving timely notice of absences, explain how work missed because of an excused absence may be made up, and stipulate any penalty to be assessed for excessive or unexcused absences.**
- The UM Faculty Senate encourages the faculty to accommodate students incurring an excused absence by allowing them to make up missed work when this can be done in a manner consistent with the educational goals of their courses. Students expecting to incur excused absences should consult with their instructors early in the term to be sure that they understand the absence policies for each of their courses."

**Eby Class Policy:** *If you have an excused absence please let me know so I can ensure that we accommodate absences for participation points. If you need to ask for an extension on an assignment, please do so AHEAD of time as much as possible. This is a smaller class so it is easier for me to accommodate issues*

### **Basic Needs Security Statement**

- Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the [Office of Student Success] for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable her to provide any resources that she may possess.