U.S. Fisheries Management and Policy

SMEA/FISH 539 (3 credits) - Winter Quarter 2024

1. Course Information

Schedule: Mondays & Wednesdays, 10:00-11:20 AM

Location: Fishery Science Building (FSH) 203

Dr. Anne Beaudreau (she/her) Email: annebeau@uw.edu

1.1 Office hours: Please see Canvas for the most up-to-date information.

1.2 COVID-19 Safety

The health and safety of students, faculty, postdocs, and staff are a priority at the University of Washington. The UW <u>Face Covering Policy</u> states that "masks are strongly recommended when returning to campus after ending COVID-19 isolation" and "after a higher risk COVID-19 exposure...until 10 days have passed from when you were exposed." Face coverings are not required, except in particular settings as described in the policy. Please monitor yourself for COVID-19 symptoms and stay home if you are sick.

2. Course Description

This course examines marine fisheries management through an interdisciplinary lens. The goal of the course is to introduce students to the social, scientific, institutional, political, and ethical dimensions of fishery management and policy, with a focus on U.S. federal, state, and tribal fisheries in the North Pacific. Topics include history of U.S. commercial fisheries and the Magnuson-Stevens Act, science supporting fishery management, management institutions and the public process, allocation and the right to fish, multi-sector multi-jurisdictional fisheries, tribal sovereignty and co-management, bycatch and ecosystem effects of fishing, ecosystem-based fishery management, stakeholder and community engagement, multiple ways of knowing in fisheries, and adaptive capacity and management under climate change. Students taking this course will gain practical skills to support their graduate research and improve their readiness for fisheries-related careers.

3. Learning Objectives

By the end of this course, students will demonstrate the ability to:

- Explain and discuss the laws, institutions, and processes of U.S. fishery management
- Summarize the types of scientific information needed for single-species and ecosystembased management
- Describe opportunities and constraints facing U.S. fishery managers and participants within existing structures and processes
- Evaluate social, ecological, and policy dimensions of management issues through writing and discussion
- Critically read literature from multiple disciplines across the applied natural and social sciences

4. Instructional Approach

The course will be taught using a combination of interactive lectures and discussion. If possible, I will invite guest speakers to provide broader perspectives on issues discussed in class. Lectures are designed to introduce students to foundational laws, principles, and processes of fishery management, illustrated using examples from the literature and contemporary management issues.

Lecture slides, assignments, and readings will be made available on Canvas. My goal with the readings is to introduce you to a diversity of perspectives and approaches to fisheries governance. In general, the assigned readings provide background, case studies, and a foundation for class discussion. You may wish to explore certain topics more deeply outside of class and for most weeks I provide additional supplementary readings, which are optional. Please view the reading list as a work in progress and I welcome any recommendations or requests you might have.

5. Learning Environment

My approach to teaching is to promote active learning in the classroom. My role in this course is to largely serve as a facilitator in your exploration of fisheries management. This includes providing the necessary background on each week's topics and moderating classroom discussions. Your role is to be an active, contributing member of the class. I welcome and look forward to your ideas and questions. I encourage you to take advantage of my scheduled office hours. If you are struggling with any aspects of the course material or learning environment, please talk with me—I am happy to provide the support you need to be successful.

During the first week of class, we will collaboratively develop a set of community agreements. These agreements will serve as a foundation for building community in our classroom and fostering an inclusive and positive learning environment.

6. Assignments

Students will be evaluated on their participation, weekly reading responses, a mid-term exam covering material from weeks 2-4, and final project.

<u>6.1 Participation</u> (15% of overall grade; 10 points/week + 2 points for completing a short preclass survey): Students will earn credit for participating in classroom discussions throughout the quarter. If you cannot attend class, please contact me as soon as you can (in advance when possible) to ensure that you meet learning objectives.

To earn full credit for participation: contribute questions or comments during class (written or verbal) or via the Canvas discussion board in the event that you miss a class.

<u>6.2 Reading responses / Knowledge sharing</u> (30% of overall grade; 10 points / assignment): **Due Tuesdays by midnight** (see Canvas for specific readings and due dates). Reflective reading responses provide an opportunity for students to write regularly, practice critically reading the

literature, share their perspectives and questions, and prepare for class discussion. Respond to the prompt posted in Canvas by providing a 1-2 paragraph discussion of one or more assigned readings for the week that offers your impressions, critical reflections, critiques, and questions that emerged from your reading. You are not expected to provide a summary of the content.

There are two options for receiving full credit over the course of the quarter:

Option 1: Complete 6 out of 7 reading responses during the quarter.
 Or

- Option 2: Complete 4 out of 7 reading responses during the quarter AND give a 10-min presentation to the class on a fisheries topic of your choice (equivalent to 2 reading responses). For example
 - a. if you have worked in fisheries, this is a great opportunity to share something about your professional experience or perspectives on an issue that you were involved in
 - b. if you do not have fisheries experience, you could discuss a recent publication or current topic in fisheries

Contact me at least 1 week prior to the class date on which you hope to present. I will try to accommodate specific date requests, but we may need to find an alternative date, depending on other scheduled class activities.

Please give the assigned papers a quick read even if you do not write a response, so that you are prepared for in-class discussion.

<u>6.3 Mid-term exam</u> (10% of overall grade; 100 points): Students will be given an in-class midterm exam during week 5. The exam will provide an opportunity to review the material for weeks 2-4, to ensure a foundation for the remainder of the class. It will focus on topics covered in lecture and readings.

<u>6.4 Final project</u> (45% of overall grade; 100 points): Because of the multidisciplinary and applied nature of fishery management and conservation, it is most often practiced in a team setting. Each student will join a team of several students (group size depends on enrollment) to complete a major course project based around a particular contemporary fishery management issue. The group will work together to identify their focal management issue; I will provide some initial ideas based on current events in fisheries. While the final paper should be written individually, the group is welcome to collaboratively research the media and peer-reviewed & gray literature related to the issue and share resources. You may also contact one or more individuals involved in any aspect of the issue to gain additional insight (optional).

In brief, the final project will consist of the following:

1. <u>Position paper (75 points)</u>: Each student will independently develop a position paper that characterizes the management issue and presents their viewpoint on the problem. The paper should include relevant background information on the ecological and human dimensions of the management issue and describe actions taken to address it by communities, stakeholders, agencies, etc. It should also include a clear thesis statement defining the student's position and support the argument with evidence from the

- literature and other sources. <u>Content</u>: Detailed guidelines will be provided in a separate document. <u>Formatting</u>: 10-12 pages double-spaced, 1-inch margins, 12 point standard font (e.g., Calibri, Times New Roman, Arial, etc.). Cited references are required and not part of the 12-page limit.
- 2. <u>Team presentation (20 points)</u>: A short-format oral presentation will be given by each group to the class at the end of the quarter. Group members will present their management issue and positions on the issue. Following the presentation, we will discuss the positions as a class and identify potential ways forward for addressing the management challenge.
- 3. One-page reflection (5 points): Each student should submit a one-page reflection (single-spaced, 12 pt font) about the group presentations and discussion. In your reflection, consider the following— How did your views change, if at all, after hearing the positions of others? Were any perspectives on the management issue, as you understand it, missing from the conversation? If there was disagreement among group members, were you able to find common ground? Where do you see the most potential for solving this issue in the real world?

Additional guidelines will be provided regarding content and structure of the final project components.

7. GradingEach assignment type comprises the following percentage of the final grade—

	Total points	Percent of
Assignment (N/quarter)	possible	grade
Final project (1)	100	45
Reading responses / Knowledge sharing (6)	60	30
Participation (10 + pre-class survey)	102	15
Mid-term exam (1)	100	10
TOTAL		100

To calculate your final grade, use the following formula:

Final grade = (45*final project points/100) + (30*reading response points/60) + (15*participation points/102) + (10*mid-term exam points/100)

Conversion of final grades to the 4.0 scale required by UW is determined as follows:

Final grade	Grade point
≥ 95	4.0
> 61 to < 94	0.7-3.9, based on formula: grade point = 0.1*final grade - 5.5
≤ 61	0.6

This scheme is based on the grading rubric developed by the UW Program on the Environment and follows UW Graduate School grading guidelines.

8. Course Policies

Late Assignment Policy: If you cannot complete an assignment on time, please contact me as far in advance as possible to request an extension. Because they are due during finals week, position papers will not be accepted past the due date (except in the case of emergency).

Academic Integrity: The University takes academic integrity very seriously. Behaving with integrity is part of our responsibility to our shared learning community. If you're uncertain about if something is academic misconduct, please ask. I am happy to discuss questions you might have.

Acts of academic misconduct may include, but are not limited to, cheating and plagiarism. Cheating is when a student gives or receives any form of assistance during an examination or quiz; duplicated or paraphrased answers on assignments are also considered cheating. Plagiarism is defined as the submission or presentation of work that is not a student's own without acknowledgment of the source. Submission of the same work in more than one course without prior approval of all professors responsible for the courses is also considered academic dishonesty.

You are responsible for understanding and following <u>The University of Washington Student Conduct Code (WAC 478-121)</u>. Concerns about behaviors prohibited by the Student Conduct Code will be referred for investigation and adjudication. Students found to have engaged in academic misconduct may receive a zero on the assignment (or other possible outcome).

Student Access and Disability Resources: Your experience in this class is important to me. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you have already established accommodations with <u>Disability Resources for Students (DRS)</u>, please activate your accommodations via myDRS so we can discuss how they will be implemented in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), contact DRS directly to set up an Access Plan. DRS facilitates the interactive process that establishes reasonable accommodations. Contact DRS at www.disability.uw.edu.

Safety and Protections from Discrimination: Title IX, Title VII, the Violence Against Women Act (VAWA), Washington State law, and University of Washington policy collectively prohibit discrimination based on sex, sexual orientation, gender, gender expression, pregnant or parenting status, and LGBTQ+ (lesbian, gay, bisexual, transgender, queer) identity. For more information on your rights and the resources available to you, please visit the <u>Title IX site</u>.

Religious Accommodation: Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information

about how to request an accommodation, is available at Religious Accommodations Policy (https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodations-request/).

The University of Washington stands on the territories of Coast Salish peoples; the Duwamish, Muckleshoot, Suquamish, Tulalip, and Puyallup.

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Specific topics subject to revision.

Week	Dates	Topic	Assignment
1	W 1/3	Welcome and introduction to the class	Complete the pre-class survey, read the syllabus, and review the Canvas site.
2	M 1/8 W 1/10	History of U.S. commercial fisheries and the MSA Common pool resources; History of commercial fisheries in the U.S.; Origin and evolution of the Magnuson-Stevens Fishery Conservation and Management Act (MSA); National Standards	Assigned reading (see Canvas). Reading response due Tu 1/9 at 11:59 pm.
		overview; National Standard 1 (OY, MSY)	
3	No class M 1/15	Management structures and the public process	Assigned reading (see Canvas). Reading response due Tu 1/16 at 11:59 pm.
	W 1/17	Federal fishery management councils; Council process; Advisory bodies (SSC, AP); Quota setting; Fishery Management Plans (FMPs); Formal and informal modes of engagement; Role of culture, norms, and values in management	
4	M 1/22 W 1/24	Science supporting fishery management National Standards 2-3 (scientific information, management units); Single-species stock assessment; Biological reference points; Harvest control rules; Rebuilding plans; Socioeconomic information	Assigned reading (see Canvas). Reading response due Tu 1/23 at 11:59 pm.
5	M 1/29 W 1/31	Mid-term review & Final project introduction M: Mid-term review; Final project group work	Response to "final project topics" prompt due F 2/2 at 11:59 pm (see Canvas).
		W: Mid-term exam (weeks 2-4)	No required readings; mid-term exam Wednesday.

6	M 2/5	Ecosystem-based fishery management (EBFM) and managing	North Pacific Fishery Management Council
	W 2/7	under climate change	meeting (2/5 – 2/12)—attend ANY DAY(s)
		Office and the of SPSM to be used from the	remotely or in-person for a total of 1 hour.
		Origins and evolution of EBFM; Integrated Ecosystem	Assigned reading (see Capyes) Boading
		Assessment (IEA); Fishery ecosystem plans; Climate change impacts on ecosystem and species; Adaptive capacity of fishing	Assigned reading (see Canvas). Reading response due Tu 2/6 at 11:59 pm.
		communities; Case study: species range shifts in the Atlantic	response due 14 2/6 at 11.35 pm.
7	M 2/12	Allocation and the right to fish	Assigned reading (see Canvas). Reading
	W 2/14		response due Tu 2/13 at 11:59 pm.
		National Standards 4-5 (allocations, efficiency); Rationalization /	
		privatization / catch shares; Equity vs. efficiency; User group	
		conflict; Case study: sablefish/halibut IFQ fisheries	
8	No Class	Multi-sector, multi-jurisdictional fisheries	Assigned reading (see Canvas). Reading
	M 2/19		response due Tu 2/20 at 11:59 pm.
		U.SCanada transboundary stocks (e.g., halibut, salmon); Pacific	
	W 2/21	Salmon Treaty; Tribal sovereignty and co-management; Case	
		study: Boldt Decision	
9	M 2/26	Communities and knowledge co-production	Assigned reading (see Canvas). Reading
	W 2/20	Notice of Charles of Charles and Charles a	response due Tu 2/27 at 11:59 pm.
	W 2/28	National Standard 8 (communities); Knowledge coproduction;	
		Local, traditional, Indigenous knowledge and fisheries; Case	
10	M 3/4	study: TEK in the Bering Sea Fishery Ecosystem Plan Student presentations and discussion	Slides due for each group 3/3.
10	W 3/6	Student presentations and discussion	Final project: 1-page reflection due F 3/8 by
	W 3/U		midnight.

Final project: position paper due Wednesday, March 13 (finals week)