

FAS 6932 Fisheries and aquaculture: An economics perspective

Short description:

This course introduces students to important issues in fisheries and aquaculture management from an economic perspective, exploring the incentives of various stakeholders in utilizing and conserving fisheries resources, as well as the impacts and effects of differing management systems on industry and ecosystems. Appropriate for students with little or no background in economics or fisheries sciences.

1 Overview

In many ways the oceans and our waterways are the last frontier. Fisheries are the last major hunting industry, and fishing is also an important recreational activity. During recent decades, global aquaculture production has exploded and has now surpassed fisheries as a source for food, primarily due to new technologies and knowledge that create new opportunities. At the same time, these evolving industries create new pressures on the ecosystem.

To a large extent, the use of the ocean and water resources is about exploiting economic opportunities, given the constraints provided by the natural resources in the system. Since these opportunities involve the use of public natural resources, it is not surprising that there are a number of conflicts between different user groups such as aquaculture producers, commercial fishers, conservationists, consumers, environmentalists, fisheries managers and recreational fishers.

Lectures and discussions are used to introduce students to key concepts and methods, and follow-up discussions will be provided in class. Prepared questions are encouraged for class participation.

- 3 Credits
- Fall 2018
- Pre-recorded lectures with face-to-face meetings (synchronous virtual participation available)
- Canvas site is available at <http://ufl.instructure.com> or <http://elearning.ufl.edu>

Course Prerequisites: None

Instructor: Dr. Frank Asche (Professor), 183 Rodgers Hall, email: frankasche@ufl.edu

Office hours: available by email or phone; office visits available by appointment.

Textbook(s) and/or readings: There is no required text for the course. Selected readings from primary literature are included in Reading List below.

2 Learning Outcomes

At the end of this course, each student will be able to:

- Describe economic opportunities in in the production, use and conservation of seafood resources.
- Describe ways fishers and aquaculturists may create environmental externalities that lead to exploitation of the ecosystem.
- Describe methods by which management systems can protect natural resources.
- Analyze the impacts of management systems design relative to various stakeholder interests.
- Analyze the economic and market effects of various management systems.
- Evaluate costs and benefits associated with various uses of fisheries and coastal resources.
- Evaluate the impact of international trade on fisheries and coastal resources.

3 Course Logistics

Learning modules consisting of lectures, readings, supporting material, and homework assignments are provided online for each topic.

This class will be offered in a “flipped” format, with pre-recorded lectures to be watched prior to class meetings on campus (with synchronous online option available).

Discussions in Canvas will be available throughout the semester to facilitate collaboration and interaction, handle course questions, and discuss material in further detail.

3.1 Assignments & Deliverables

Reading Reflections.

Throughout the semester, you will be expected to complete four (4) of six (6) possible reflection papers on assigned readings. These reflections should be a maximum of 1-2 pages in length and should provide evidence of critical thinking about the literature, including questions you have, unaddressed issues in the science or policy, etc. Citation of additional references is encouraged but not required.

- Each reflection is worth 10% of the total grade for a total of 40%.

Case Study Project/Writing Assignment.

A significant portion of the grade is a paper where the student chose a case to analyze based on the materials provided in the course. This paper will be split into two (2) submissions:

- Initial topic and case study site selection (participation grade)
- Final paper (50%), including at least the following sections:
 - Introduction
 - Background
 - Analysis
 - Recommendations
 - References

The final submission should be between 10-15 pages not including references. Use correct *Marine Resource Economics* journal style for citations and writing. See rubric in Canvas Assignments for more details.

Participation.

Attendance at all course meetings (virtual or face-to-face) is expected.

3.2 Grades & Grading Scales

- 10% Attendance and participation in discussions
- 5% Case study: topic submission
- 40% Reflection papers (4 required out of 6 possible, 10% each)
- 45% Case study: Final submission of complete case study

Grades will be allocated as: A (93-100%), A- (90-92%), B+ (86-89%), B (82-85%), B- (78-81%), C+ (74-77%), C (67-73%), C- (63-66%), D+ (59-62%), D (55%-58%), D- (51-54%), E (<50%). Rounding to the nearest whole.

For information on current UF policies for assigning grade points, see

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

4 Course Content

Week	Topics
1	Introduction Important challenges for utilization and conservation of seafood Background on some of the conflicts The economic incentives: Opportunities and challenges
2	Overview of global and U.S. seafood production and consumption including aquaculture and fisheries as production technologies Overview of global seafood production Why trade? Livelihoods and communities
3	The tragedy of the commons, causes and consequences The benefits of regulating fisheries in the environmental and economic dimensions
4	Fisheries regulations and incentives Command and control The race to fish Overcapacity and subsidies
5	Fisheries regulations and incentives Individual Fishing Quotas Quota Transferability Employment and livelihoods in different regulatory systems
6	Recreational fishing Conservation and hatcheries Competition between recreational and commercial fishers
7	Aquaculture: Farming not hunting

	Why do aquaculture production grow so rapidly
8	Aquaculture: Environmental issues, regulation and livelihoods Why is not much farmed fish being produced in the U.S.?
9	Markets
10	Supply chains
11	Seafood trade
12	The sustainable seafood movement Eco-labeling
13	Illegal, unreported and unregulated (IUU) fishing High-seas stocks: Exploitation and management
14	Work on final paper
15	Work on final paper

5 Policies and Requirements

This syllabus represents current plans and objectives for this course. As the semester progresses, changes may need to be made to accommodate timing, logistics, or to enhance learning. Such changes, communicated clearly, are not unusual and should be expected.

5.1 Late Submissions & Make-up Requests

It is the responsibility of the student to attend meetings, complete prep work, and submit assignments as given to maintain satisfactory progress in the course.

Requirements for class attendance and make-up work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

5.2 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest Resources & Conservation will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required, but encouraged. This is not the UF Faculty Evaluation!

At the end of the semester, students are expected to provide UF with feedback on the quality of instruction in this course using a standard set of university and college criteria (UF Faculty Evaluations). These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for

students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

5.3 Netiquette: Communication Courtesy

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Failure to do so may result in loss of participation points and/or referral to the Dean of Students' Office. <http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

5.4 Academic Honesty Policy

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."*

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct or appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

5.5 University Policy on Accommodating Students with Disabilities:

Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams.

Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

5.6 Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

6 Getting Help

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFRC Academic Hub <https://ufl.instructure.com/courses/303721>

6.1 Student Life, Wellness, and Counseling Help

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care serves as UF's umbrella program for UF's caring culture and provides students in distress with support and coordination of the wide variety of appropriate resources. Visit <http://www.umatter.ufl.edu/> or contact umatter@ufl.edu seven days a week for assistance for students in distress.
- Career Resource Center <http://www.crc.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

6.2 Student Complaint Process

The School of Forest Resources & Conservation cares about your experience and we will make every effort to address course concerns. We request that all of our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered.

If you have a more urgent concern, your first point of contact should be the SFRC Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- Students in online courses: <http://www.distance.ufl.edu/student-complaint-process>
- Students in face-to-face courses:
https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf