ECON 539
Natural Resource Economics III: Fisheries Economics
3 Credits

Instructor:
Prof. Chris Anderson
316A FISH Building
(206) 543-1101
cmand@uw.edu

Objective:
Commercial, recreational and subsistence fisheries come in many forms, with different biological properties, harvesting technologies, market organizations, governance structures, social objectives and management strategies. Because of this, fisheries are a fertile ground for suggesting interesting, policy relevant, and often fundable, economic modeling problems using a broad range of tools, including dynamic optimization, game theory, industrial organization, political economy, development and cutting-edge econometrics.

The objective of this graduate seminar is to familiarize you with classic papers and frontier research in natural resource economics, with an emphasis on fisheries economics, such that you will be able to formulate theoretical and empirical models that contribute to economists’ understanding of the economic and ecological effects of the behavior of resource users and the systems used to manage them. In doing so, you will develop skills in reading and critiquing articles, professional presentation, and project development.

Prerequisites:
We will be reading and discussing economics journal articles and current research. Papers will emphasize varying degrees of mathematical modeling and econometric estimation. You should be comfortable with mathematical modeling and optimization, and with econometric analysis.

Grading and Course Requirements:
You will be responsible for weekly preparation and participation, as well as leading paper discussions and a written assignment.

Each week, two papers/readings will be assigned for discussion in the following class. Every member of the class is expected to read the papers and participate in the discussion. The day before class, each class member will post discussion questions to the course Canvas site, and they will serve as a starting point for the following day. The discussion of each paper will be led by a fellow student, me or a guest speaker. The discussion leader will prepare a detailed, seminar-scale presentation of the paper’s model and results. The focus of the discussion will be how the authors developed their theoretical and empirical models. Discussion leadership will rotate among class members.
The quality of your participation, as subjectively determined by me, will constitute 45% of your grade; the quality of your presentations will be another 15% of your grade.

The remaining 40% of the grade will be based on a fellowship project proposal. In this assignment, you will identify an RFP for a graduate fellowship that will support your pursuit a project in natural resource economics (I have a list of suggestions). You will write a project proposal with a level of refinement sufficient to be competitive for the fellowship. There will be intermediate due dates during the quarter so that you may refine your proposal.

Key Resources and Opportunities:

**Bevan Series Seminar** 4:30 Thursdays in 102 FISH. International experts talk on different sides of current scientific and policy controversies in fisheries. This quarter focuses on how fisheries and fishery management can adapt to climate change, and there are several policy speakers. https://fish.uw.edu/news-events/seminar-series/bevan-series/

**MONSTER JAM** (11:00 Thursdays NWFSC). Invited seminar series at NOAA, with a few social scientists each season. (Class conflict, but it runs continuously during the academic year.)

**North Pacific Fishery Management Council** (Feb 5-12 Reniassance Hotel). The North Pacific Fishery Management Council will meet to evaluate new fishery policies for the federal waters off Alaska. There are three major panels meeting: the Scientific and Statistical Committee (2/5-7); the industry Advisory Panel (2/6-8); and The Council itself. I am on the SSC.

Readings

**Status of Fisheries and Management (Background)**


Bioeconomic Models of Common Pool Resources

Classic Models


AND


Models with More Complexity


Management and Behavior

Spatial Decision Making

Haynie, A. and D. Layton. 2010. An Expected Profit Model of Monetizing Fishing


Strategic Games


Market and Harvest Timing


Multispecies Fisheries


Individual Transferable Quota

Theory


Recent Empirics


Markets for Quota


Distributional Effects


**Broader Objectives: The Triple Bottom Line**


**Production**


**Aquaculture**


Fishing-Related Nonmarket Valuation

Recreational Fishing


Consumer Demand

