Objectives: To examine the principles of fisheries science from the basic biology of individuals to dynamic processes of populations, whole fisheries, and how mathematical models are derived to predict changes in fisheries for management purposes.

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Grading: 3 Exams each exam 10% of grade Exercises 30%
Paper 20%
Presentation 10%
Peer review 5%
Attendance/Participation 5%

Grading Policy: You are expected to attend all lecture and tutorial sessions. Lectures will not be recorded. All homework exercises (including reading presentations) must be handed in by 2:30 pm on the due date. Late assignments will incur a 20% penalty during the first 7 days past the due date. No assignments will be accepted more than 7 days past the due date.

Exams: Exams will be held during class time. Any makeup exams will be ORAL exams honoured only with the accompaniment of a medical/personal emergency excuse.

Academic honesty Students will be expected to adhere to the UVic Policy on Academic Integrity standards (http://web.uvic.ca/calendar2012/FACS/UnIn/UARE/PoAcI.html). You may discuss how to solve homework assignments together, but are expected to compute and write your results separately.

Paper: A brief summary of the fisheries biology and management of a (marine) species of your choice. A handout outlining appropriate literature and paper format will be distributed in class. For library research help, see our course library guide, http://libguides.uvic.ca/FisheriesEcology
Species choice and 5 references: Due October 13
Final: Due November 17
Length: 5-7 pages (Double-spaced, 12 point font, 1 inch margins)

Presentations: Students will deliver a live or recorded oral presentation on species papers during the last weeks of classes (due November 24 or December 6). Graduate students will lead book review and present oral and written summaries of assigned chapters, and work on a data project.

Grading scale (GPA): A+=90-100 (9); A=85-89 (8); A-=80-84 (7); B+=77-79 (6); B=73-76 (5); B-=70-72 (4); C+=65-69 (3); C=60-64 (2); D=50-59 (1); F=<50 (0)
Course Outline

Part 1. Introduction

Basic definitions

Marine Fisheries Management:

- Current Issues
  - Objectives and goals
  - Marine ecology and production
  - Fishery Resources
  - Fishing Gear and Methods
  - History of Fisheries
  - Aquaculture production
  - Fisheries today: wild vs aquaculture
    - Global
    - Canada

EXAM 1—OCTOBER 6

Species choice and references due OCTOBER 13

Part 2. Population dynamics

- Age and Growth
- Density-independent mortality
- Density-dependent mortality
- Reproduction
- Recruitment
- Stock-recruitment models
- Age-structured models

EXAM 2—NOVEMBER 7

Part 3. Fishery processes

- Surplus production models
- Dynamic Pool models
- Cohort models (Virtual Population analysis)
- Management tactics and strategies
- Socio- and Bio-economic models
- Conservation issues

Papers due on NOVEMBER 17
Oral Presentations due on NOVEMBER 24
Peer reviews due on DECEMBER 12

EXAM 3—December 1

Part 4. Student presentations

(A mini-symposium on reading day? Dec 6)

NOTE, Monday October 10 and Thursday November 10 are both holidays.