

BIOL 461/561: Fisheries Ecology and Management

Lecture: Mon-Thurs 2:30-3:50— MAC D103

Tutorial: Thurs 4:00-4:50— MAC D103

Grad student tutorial: Mon 4:00-4:50— MAC D103

FALL 2024 (CRN: 10408)

Course Outline

Part 1. Introduction

Basic definitions

Marine Fisheries Management:

Current Issues	
Objectives and goals	Chapter 1, 17
Marine ecology and production	Chapter 2
Fishery Resources	Chapter 3
Fishing Gear and Methods	Chapter 5
History of Fisheries	
Aquaculture production	
Fisheries today: wild vs aquaculture	
Global	
Canada	

EXAM 1--OCTOBER 7

Species choice and references due **OCTOBER 17**

Part 2.

Course description and learning outcomes

Lectures are where most of the course content will be delivered, with lecture notes available on brightspace before the lecture is delivered. This is also where any updates on course material, deadlines, seminars of interest, etc. will be announced. I will also briefly summarize the previous lecture's highlights at the beginning of a lecture. These summaries will not be posted.

Exercises are intended to develop analytical skills by applying course information to practical questions about age and growth, mortality, life tables, etc. We will use EXCEL for all computations.

Intended Learning Outcomes

In this course students will learn about multiple aspects of fisheries science, from an ecological and management perspective. In Part 1, we will focus on providing a historical background as well as outlining harvest methods, commonly harvested species, and the state of fisheries globally, in Canada and in BC. In Part 2, we will focus on learning core concepts in population biology and ecology such as age/growth, reproduction, recruitment, and mortality. In Part 3, we will apply these core courses into management models primarily for single species, but with a brief introduction to multispecies and ecosystem management. Students will develop core competencies in the ability to: apply the process of science to management, use quantitative reasoning, basic population modeling, incorporate multidisciplinary aspects of fisheries, communicate your understanding thru exams, exercises, a paper and oral presentation, and ultimately understand relationship between fisheries science and society. Specific skills will include: following detailed instructions, assessing and summarizing scientific information, make measurements from video footage, record and summarize collected data, basic statistical analysis, data visualization, data interpretation, mathematical problem solving, written and oral communication.

Academic honesty

Students will be expected to adhere to the UVic Policy on Academic Integrity standards (<https://www.uvic.ca/students/academics/academic-integrity/index.php>). You may discuss how to solve homework assignments together, but are expected to compute and write your results separately.

Withdrawals and Deferrals

Students are to familiarize themselves with the withdrawal dates in the academic calendar (<https://www.uvic.ca/calendar/dates/>).

Accessibility Statement

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (<https://www.uvic.ca/accessible-learning/index.php>) as soon as possible. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

A Note on Plagiarism

University Policy on Human Rights, Equity, and Fairness

According to the Policy on Human Rights, Equity, and Fairness

(https://www.uvic.ca/universitysecretary/assets/docs/policies/GV0200_1105_.pdf), the “University promotes a safe, respectful and supportive learning and working environment for all members of the university community. The University fosters an environment characterized by fairness, openness, equity, and respect for the dignity and diversity of its members. The University strives to be a place that is free of d