

AQFI 301 - Field Methods for Assessment of Fisheries and Aquatic Habitats 2019

(First Semester 0.15 EFTS 18 points)

This paper introduces and applies methodology used to assess the functioning and status of fisheries and aquaculture operations. This methodology is also broadly useful for management of environments and natural resources. Students will come to understand the general research process from project development to reporting to end users for scientific surveys of fisheries and environmental impacts.

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Course Structure:

Lectures and Workshops (Otago Campus 4th and 5th Feb)

Meet at the Marine Science Seminar Room (MS140) at 1000 am on Monday the 4th of February
Series of lectures and fieldtrip as well as workshops to design and plan research projects. An introduction to the East Otago Taiāpure and surrounds (natural and cultural landscape) will be provided, but also an introduction to the community and their concerns around fisheries and the environment. During this time research groups (normally 3 people) and projects will be established

Introduction to tikanga at the marae, development of mihi mihi, waiata practice. Introduction to kaitiakitanga and tikanga around fisheries. (Russell/Hepburn)

Ethical considerations. Brief primer on ethical use of animals in research followed by an online assessment to be approved to handle animals on the course. (Hepburn)

East Otago Taiāpure and Fisheries management in New Zealand.

A short history of New Zealand fisheries from pre-European until the modern day with a focus on customary protection and legislation developed following the advent of the Quota Management System. (Hepburn)

Designs for monitoring fisheries and the environment. The importance of randomisation, accounting for spatial and temporal variability and adequate sampling size and power will be presented. Commonly used monitoring designs and practical limitations to monitoring aquatic systems. Choice of the appropriate methodology to detect impacts (e.g. indicator species, cultural assessments) (Hepburn/Pritchard)

Team Presentation of planned research (5%)

Development of hypotheses and plans for self-guided group work will occur during this period. On Tuesday afternoon there will be a presentation of research plan and hypotheses by each group.

Wednesday 6th February: Waitangi day No Classes

Field Trip – East Otago Taiapure based at Karitane (7th – 13th Feb)

Day one (Thursday 7th February)

Leave from Marine Science Department, mihi mihi. Afternoon, prepare for fieldwork

Days two to six (8th - 12th February): Student-led research.

Last Day (13th February): Preliminary data presentation to the community.

Clean up. Poroporoaki (farewell ceremony). Leave mid afternoon.

Follow-up Support and Tutorials (14th - 15th February)

Data workshop (Marine Science Seminar Room (MS140)). A two day lab that will allow for data analysis presentation and the development of an outline for the report.

Assessment

- **Team Presentation of planned research (5%) 5th of February**
- **Personal contribution to research groups in the field (5%).** Commitment to team, motivation and application will be assessed by staff involved in the course
- **Due 15th February – Data report (5%).** All data gathered provided in appropriate format.
- **Due 1st of March – Report Plan (10 %).** Outline of planned report, structure, hypotheses, figures
- **Due 12th April – Research Report (75%).** An end-user focused report on a research project that investigates an aspect of fisheries and the environment in the East Otago Taiāpure (8000 words maximum, excluding references)

Communication

When the Department of Marine Science communicates with you, it will be via your student email address (@student.otago.ac.nz). Please make sure that you check this address regularly, or that you arrange forwarding to an address you check regularly.

There will be a student representative chosen by students to take care of official communications and feedback for this group of students. Make sure you know who she/he is.

Plagiarism

Any student involved in dishonest practice, whether intentional or arising through failure to take reasonable care, will be subject to the University's Dishonest Practice Procedures which contain a range of penalties. Dishonest practice is seeking to gain for yourself, or assisting another person to gain, an academic advantage by deception or other unfair means. The most common form of dishonest practice is plagiarism. Dishonest practice in relation to work submitted for assessment (including all course work, tests and examinations) is taken very seriously at the University of Otago. If you are ever in doubt concerning what may be acceptable academic practice in relation to assessment, you should clarify the situation with your lecturer before submitting the work.

Useful Links

Department of Marine Science website	http://www.otago.ac.nz/marinescience
Postgraduate student support	http://hedc.otago.ac.nz/hedc/sld/Postgraduate-Students.html
University policy on plagiarism	http://www.otago.ac.nz/study/plagiarism.html
Student Learning development	http://hedc.otago.ac.nz/hedc/sld.html
University Library E-Journals	http://rb6fc7tv6s.search.serialssolutions.com/
University Library E-Reference	http://www.library.otago.ac.nz/research/index.html
Otago staff contacts	http://www.otago.ac.nz/phonebook/letters.html

Help

If you need it, please ask for help. You can come see me in my office. You can send me an email (chris.hepburn@otago.ac.nz) or give me a call (4797462). You may refer questions to the Student Rep in the class if you don't feel comfortable asking me yourself. If that won't work, please find another staff member with whom you feel comfortable to talk to. Or head over to Student Health, where they have counselling available.