

Summer 2016

Instr: R. Burnham
DTB B113a

Geography 474
Field Studies in Biogeography

Course Objective

This course will cover much about the biogeographical approach to marine studies. Theories and concept of ecological study will be complemented with the study of how data is accurately and consistently collected, all with the aim of answering a research question. We will draw on long-term data sets of the Whale Research Lab as well as more cutting-edge research, specifically in the areas of predator driven system economics, particularly in terms of foraging whale presence; predator-prey interaction and invertebrate community dynamics, and underwater acoustics and the use of sonic processes by marine organisms.

Course material will cover the biology and ecology of whales and their prey and a more general appreciation of marine system productivity in Clayoquot Sound and the wider west coast. Scientific investigation involves detailed data collection and observations, and so students will be able to follow the process through hypothesis building, data collection and analysis, to result presentation and discussion. The objective of this course is to create a foundation of information and skills so the student may integrate material from various sources including scientific literature and field data, to build a critically enhanced body of knowledge on a marine-based research topic.

Teaching/Learning Method

This course will integrate teaching and learning through both formal learning situations (i.e. lectures and seminars) and field surveys. Concepts and theories of marine ecology and field research methods will be introduced to the group, with reinforcement through data collection, analysis and presentation.

There is no single text that covers this material, as the course is a general introduction to the topic, and the research topics covering a wide range of material. Academic research papers will be recommended as core material to work from, with suggestions made throughout the class as to where other useful reading material may be found, often more specific to an individual's research topic.

Assessment

Students will complete a research paper on one aspect of the ongoing research of the Whale Research Lab, drawing on previous data as well as that acquired throughout the course. A research paper, outlining a proposed line of inquiry or an analysis of a data stream will be started in the field, and completed in time following the course. A presentation will be given to outline the research idea and methods, as well as any preliminary results. Throughout the time in the field students will be encouraged to

actively take part in all aspects of fieldwork, which will contribute to their participation mark.

Each student grade will be a sum of the following proportions:

Research Paper	70%
Research presentation	15%
Participation	15%

Undergraduate Grading

<i>Passing Grades</i>	<i>Description</i>
A+ 90% - 100% A 85% - 89% A- 80% - 84%	Exceptional, outstanding and excellent performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
B+ 77% - 79% B 73% - 76% B- 70% - 72%	Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
C+ 65% - 69% C 60% - 64%	Satisfactory, or minimally satisfactory. These grades indicate a satisfactory performance and knowledge of the subject matter.
D 50% - 59%	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F 0% - 49%	Fail

Course Experience Survey (CES)

Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey provides feedback to me regarding the course and my teaching, and will help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.