

BIOL 4100 - FIELD METHODS IN MARINE ECOLOGY

Dates, costs and activities

Dates

Field Methods in Marine Ecology is an intensive, 2 week course focussed on providing students with valuable hands-on experience measuring properties of the ocean and of marine organisms, and in independent research in marine ecology. The course is scheduled in early May to minimize overlap with potential summer employment opportunities.

The 2013 edition of Field Methods in Marine Ecology will take place from **April 29 to May 12**, inclusive.

Location

The entire course will take place at the **Bamfield Marine Sciences Centre (BMSC)**, located in the town Bamfield on the West Coast of Vancouver Island. BMSC is internationally renowned for its research, teaching, and public education activities. For the duration of the course, students will live on-station in the BMSC residences, and will be provided with all daily meals at the BMSC cafeteria.

Costs

In addition to regular tuition fees, a course fee is required to cover student expenses while in residence at BMSC. The course fee will cover student housing, all meals, the use of BMSC boats, classroom and laboratory facilities, computers and library, as well as all supplies and equipment used in the course. The actual cost for the above is approximately \$1800 per student. The TRU department of Biological Sciences will help cover some of the student costs; students are required to cover most of these costs.

The course fee to be paid by each student is **\$1750**.

TENTATIVE SCHEDULE OF ACTIVITIES FOR BIOL4100: FIELD METHODS IN MARINE ECOLOGY

29 April - 12 May 2013, Bamfield Marine Sciences Centre

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p>Ongoing activities throughout the course:</p> <ul style="list-style-type: none"> -exploration of coastal marine habitat diversity -field observations of marine birds & mammals -exploration of interactions between terrestrial and marine ecosystems 						April 27
April 28 Students arrive in Bamfield in evening, first night at BMSC.	29 -Visit: BMSC facilities -Lecture: phys & chem properties of ocean ecosystem -Tide tables & charts -Field: measuring phys & chem properties of ocean ecosystem	30 -Field: phyto- & zoo-plankton sampling -Lab: analysis of plankton samples -Lab: phytoplankton culture techniques -Start plankton culture experiment -Field: nighttime	May 1 -Field: set crab traps -Field: collect intertidal macroalgae -Lab: ident. & mounting of macroalgae	2 -Field: recover crab traps -Field: collect intertidal benthic inverts -Lab: analysis of collected species -Visit: oyster farming operation	3 -Field: excursion on research vessel; dredging, trawling for fish & shrimp, visit of sea lion colony -Lab: analysis of catch	4 -Field: fish seining in shallow water habitats (Grappler) -Lab: analysis of collected species
5 -Individual study time: preparation for student projects. -Hand in student journals for mid-course review -Quiz #1	6 -Field: dist. & abund. of benthic org; transect sampling of rocky shore (Seppings Isl. or North Helby Isl.) -Lab: analysis of transect data	7 -Lab: analysis of invert & macroalgae transect data -Lab: final analysis of phytopl. expt -Presentation of student project proposals	8 -Student research projects. -Quiz #2	9 -Student research projects.	10 -Student research projects.	11 -Student research projects. -Quiz #3
12 -Presentation of research projects -Hand in reports & journal -Wrap-up & clean-up Leave Bamfield	13	14				