



CAMOSUN COLLEGE
School of Arts & Science
Department

ENVR 244: Invertebrate Diversity/Ecology
Fall, 2012

COURSE OUTLINE

The Approved Course Description is available on the web @ _____

⚡ Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for your records.

1. Instructor Information

- (a) Instructor: Joachim (Yogi) Carolsfeld
- (b) Office hours: TBA
- (c) Location: TBA
- (d) Phone: 250-380-7585
- (e) E-mail: yogi@worldfish.org

2. Intended Learning Outcomes

At the completion of this course, students will possess the expertise and proficiency to be able to:

1. Use standard biological lab equipment, especially microscopes.
2. Use logic, critical thinking, and the scientific method in combination with biological terminology pertinent to invertebrates to evaluate and assess the current status of BC invertebrates.
3. Use biological identification keys for selected groups of invertebrates of B.C.
4. Sample fresh water and marine habitats, soil and terrestrial debris in order to determine the types of living organisms present.
5. Preserve and/or culture various selected invertebrates.
6. Sample terrestrial and aquatic habitats for invertebrates and understand basic methods of habitat restoration.
7. Describe biodiversity issues including rare and endangered species, introduced species, overharvesting impacts and affects of habitat loss.
8. Discuss the principles of systematics, evolution and wildlife management as they apply to the important ecological or economic invertebrate species of B.C.
9. Discuss the importance and impact of policy and legislation on wildlife management issues.

3. Required Materials

- (a) none
- b) Lectures and notes available on course website.

4. Course Content and Draft Schedule

<u>Week #</u>	<u>Date</u>	<u>Lecture</u>	<u>Laboratory</u>
1	Sept 4/6	Introduction & biodiversity overview	Taxonomic keys <u>Laboratory #1</u>
2	Sept. 11/13	Legislation overview	Legislation SARA/COSEWIC
3	Sept. 18/20	Porifera & Cnidaria (Sponges, jellies)	Porifera & Cnidaria <u>Laboratory #2</u>
4	Sept. 25/27	Mollusca & Lophophorates	Mollusca & Lophorates <u>Laboratory #3</u>
5	Oct. 2/4	Gastropod Guest Lecture	Gastropod Lab or Field trip
6	Oct. 9/11	Marine Arthropods (crabs, barnacles plus)	Aquatic Arthropods <u>Laboratory #4</u>
7	Oct. 16/18	Midterm exam (covers up to and including Molluscs)	RBCM field trip (to be confirmed)
8	Oct. 23/25	Legislation project presentations	Legislation project presentations
9	Oct. 30 – Nov. 1	Guest lecture: Terrestrial Arthropods (Insects, mites & ticks)	Terrestrial Arthropods <u>Laboratory #5</u>
10	Nov. 5/8	Echinodermata	<u>Laboratory#6</u> Echinoderms
11	Nov. 13/15	Guest lecture – indicator species	Bioassay and invertebrate culture
12	Nov. 20/22	Shellfish Culture and Harvest	Field trip (to be confirmed)
13	Nov. 27/29	Urochordates & minor phyla	Urochordates & minor phyla
14	Dec. 4/7	Review	Invert Lab exam

5. Basis of Student Assessment (Weighting)

(a) Assignments

Lab assignments & field trip reports: 5%

Weekly written assignments (critter features): 10%

(b) Exams

Mid-term exam: 10%

Laboratory exam: 15%

Final exam: 30%

(c) Other:

Review Papers and oral presentations: 30%

6. Grading System

The following percentage conversion to letter grade will be used:

A+ = 90 - 100%

A = 85 - 89%

A- = 80 - 84%

B+ = 77 - 79%

B = 73 - 76%

B- = 70 - 72%

C+ = 65 - 69%

C = 60 - 64%

D = 50 - 59%

F = 0.0 - 49%

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

EARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office or the College web site at <http://www.camosun.bc.ca>

ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html