



CAMOSUN COLLEGE
School of Arts & Science
Department

ENVR 244: Invertebrate Diversity/Ecology
Winter, 2013

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: Thursday, 12:30 – 13:20 Fisher 244
Friday 10:30-11:30 Fisher 214A
- (c) Location: see above
- (d) Phone: 250-380-7585
- (e) E-mail: yogi@worldfish.org

Lab: 9:30 – 12:30, Thursdays, Fisher 244
Lecture: 9:30 – 10:30, Fridays, Paul 109.

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 – see notes on recommended reference texts
- b) Lectures and notes available on course website.

4. Course Content and Draft Schedule (updated Jan. 24, 2013)

<u>Week #</u>	<u>Date</u>	<u>Laboratory</u>	<u>Lecture</u>
1	Jan 10/11	Biodiversity & Taxonomic keys <u>Laboratory #1</u>	Porifera, Cnidaria & Ctenophores (Sponges, jellies)
2	Jan. 17/18	Porifera & Cnidaria <u>Laboratory #2</u>	Platyhelminthes, nematodes & Annelids
3	Jan. 24/25	Annelids & other worms Laboratory #3	Mollusca
4	Jan. 31/Feb 1	Mollusca <u>Laboratory</u>	Arthropods 1st critter sheet due
5	Feb. 8/9	Marine Arthropods <u>Laboratory #4</u>	Arthropods & review
6	Feb. 14/15	Legislation SARA/COSEWIC #3	Midterm exam (covers up to and including Marine Arthropods)
7	Feb. 21/22	Reading Break	Reading Break
8	Feb. 28/ Mar. 1	Legislation project presentations COSEWIC due	Legislation project presentations
9	Mar. 7/8	RBCM field trip	Terrestrial Arthropods (Insects, mites & ticks)
10	Mar. 14/15	Terrestrial Arthropods <u>Laboratory #5</u>	Echinodermata
11	Mar. 21/22	Echinoderms <u>Laboratory#6</u> 2 nd Critter Sheet due	Minor Phyla and Bioassays
12	Mar. 28/29	Guest lecture – indicator species	Invertebrate Ecology & surveys
13	Apr. 4/5	Field trip (to be confirmed)	Shellfish Culture and Harvest
14	Apr. 11/12	Minor phyla and larviculture	Review
15	Apr. 18/19	Invert Lab exam	Review

5. Basis of Student Assessment (Weighting)

(a) Assignments

Field trip reports: 5%
Weekly lab quizzes: 5%
Critter features: 5%

(b) Exams

Mid-term exam: 10%
Final Laboratory exam: 15%
Final exam: 30%

(c) Other:

COSEWIC assignment: 5%
Oral presentation (legislation): 20%
Legislation briefing notes: 5%

6. Grading System

The following percentage conversion to letter grade will be used:

A+ = 90 - 100%	B = 73 - 76%	D = 50 - 59%
A = 85 - 89%	B- = 70 - 72%	F = 0.0 - 49%
A- = 80 - 84%	C+ = 65 - 69%	
B+ = 77 - 79%	C = 60 - 64%	

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