



CAMOSUN COLLEGE
School of Arts & Science
Department

ENVR 244: Invertebrate Diversity/Ecology
Fall, 2015

COURSE OUTLINE

The Approved Course Description is available on the web @ ENVR 244 D2L

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

1. Instructor Information

- (a) Instructor: Michael Kory
- (b) Office hours: Thursday 10:30-12:30 or by request/appointment.
- (c) Location: F344D
- (d) Phone: Campus office 250-370-3506; cell (250) 516-2415
- (e) E-mail: KoryM@camosun.ca

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. Selected readings placed on reserve.

4. Course Content and Draft Schedule

<u>Week #</u>	<u>Date</u>	<u>Lecture</u>	<u>Laboratory</u>
1	Sept 9/11	Legislation SARA/COSEWIC overview	Course Introduction; Microscopes, Taxonomic overview <u>Laboratory #1</u>
2	Sept. 16/18	Cnidaria	Porifera (Sponges) <u>Laboratory #2</u>
3	Sept. 23/25	Platyhelminthes Nemertea, Rotifera, Nematoda	Cnidaria (Hydrzoans, jellies, anemonies, corals) <u>Laboratory #3</u>
4	Sept.30/Oct.2	Mollusca & Gastropods Lophophorates	Platyhelminthes Nemertea, Rotifera, Nematoda <u>Laboratory #4</u>
5	Oct. 7/9	Mollusca Lab exercise	Mollusca Federal Ministry Speaker <u>Laboratory #5</u>
6	Oct. 14/16	Midterm exam (covers up to and including Molluscs)	BC Museum Collections Field Trip
7	Oct. 21/23	Annelids	Shaw Ocean Discovery Center Field Trip
8	Oct. 28/30	Marine Arthropods (crabs, barnacles plus Insects)	Annelids <u>Laboratory #6</u>
9	Nov. 4/6	Guest lecture: Terrestrial Arthropods (Insects, mites & ticks)	Legislation project presentations
10	Nov. 11/13	Echinodermata	Terrestrial Arthropods <u>Laboratory #7</u>
11	Nov. 18/20	Indicator species	Echinoderms <u>Laboratory #8</u>
12	Nov. 25/27	Shellfish Culture and Harvest	Freshwater Indicator Species Bioassay and invertebrate culture <u>Laboratory #9</u>
13	Dec. 2/4	Lab exam Review	Urochordates & minor phyla <u>Laboratory #9</u>
14	Dec. 9/11	Review	Invert Lab exam

5. Basis of Student Assessment (Weighting)

(a) Assignments:

COSEWIC assignment: 5%

Invertebrate species review (critter features X2): 15%

(b) Exams:

Mid-term exam: 15%

Laboratory exam: 20%

Final exam: 25%

Lab quizzes: 5%

(c) Other:

Legislation review briefing notes(5%) and oral presentations(10%): 15%

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