

### CAMOSUN COLLEGE

### School of Arts & Science Department

# **ENVR 244: Invertebrate Diversity/Ecology Sept - Dec, 2014**

### **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, 10:30 - 12:00 or by appointment

(c) Location: Fisher 344D

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

### Version IV, Mar 31, 2013

Week #	<u>Date</u>	<u>Laboratory</u>	<u>Lecture</u>
1	Sept. 4		Introduction Biodiversity & Taxonomic keys
2	Sept. 8/11	Biodiversity & Taxonomic keys <u>Laboratory #1</u>	Porifera, Cnidaria & Ctenophores (Sponges, jellies)
3	Sept. 15/18	Porifera & Cnidaria <u>Laboratory #2</u>	Platyhelminthes, nematodes & Annelids
4	Sept. 22/25	Annelids & other worms Laboratory #3	Mollusca
5	Sept. 29 – Oct.2	Mollusca <u>Laboratory</u>	Arthropods 1 <sup>st</sup> critter sheet due
6	Oct. 6/9	Marine Arthropods <u>Laboratory</u> #4	Legislation
7	Oct. 13/16	Thanksgiving	Midterm exam (covers up to and including Marine Arthropods)
8	Oct. 20/23	Legislation SARA/COSEWIC	Terrestrial Arthropods Guest Lecture
9	Oct. 27/30	RBCM field trip	Legislation project presentations COSEWIC due
10	Nov. 3/6	Legislation project presentations	Echinodermata Instructor assessment
11	Nov. 10/13	Echinoderms <i>Laboratory#6</i> 2 <sup>nd</sup> Critter Sheet due	Urochordates & Lophophores
12	Nov. 17/20	Urochordates & Lophophores	Review & Ecology
13	Nov. 24/27	Field trip Shaw Centre	Review
14	Dec. 1/4	Invert Lab Exam	
			Final Exam

### 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 <a href="http://www.camosun.bc.ca">http://www.camosun.bc.ca</a>

#### **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