

School of Arts & Science ENVIRONMENTAL TECHNOLOGY DEPARTMENT ENVR 244

Invertebrate Diversity & Ecology WINTER 2017

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/envr.html

 Ω Please note: the College electronically stores this outline for five (5) years only. It is **strongly recommended** you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Michael Kory		
(b)	Office Hours:	Wednesday 2:30 - 4:30		
(c)	Location:	Lansdowne F334D		
(d)	Phone:	(250) 370-3506	Alternative Phone:	(250) 516-2415
(e)	Email:	korym@camosun.bc.ca		
(f)	Website:			

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

Upon completion of this course the student will 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.
- 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) Texts: None required; reference books provided in labs.
- (b) Lectures and notes available on course website. Selected readings placed on reserve.

4. Course Content and Schedule

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Week #	<u>Date</u>	<u>Lecture</u> Monday 13:30-14:20 P109	<u>Laboratory</u> Thursday: 09:30 – 12:30 F244
1	Jan. 9/12	Course Introduction;	Laboratory #1 Microscopes, taxonomic overview of course
2	Jan. 16/19	Legislation SARA/COSEWIC overview	<u>Laboratory #2</u> Guest Lecturer Syd Cannings COSEWIC
3	Jan. 23/26	Porifera (Sponges) Cnidaria	<u>Laboratory #3</u> Porifera (Sponges)
4	Jan. 30/ Feb 2	Cnidaria (Hydrozoans, jellies, anemones, corals)	Laboratory #4 Shaw Center of the Salish Sea Field Trip TBA (availability)
5	Jan. 30/ Feb. 2	Platyhelminthes (Flatworms, Tapeworms, fukes)	Laboratory #5 Cnidaria (Hydrozoans, jellies, anemones, corals) (Ctenophores: comb jellies)
6	Feb. 6/9	Mollusca	<u>Laboratory #6</u> Platyhelminthes Nemertea, Rotifera, Nematoda
7	Feb. 13/16	READING BREAK	READING BREAK
8	Feb. 20/23	Mollusca	<u>Laboratory #7</u> Mollusca
9	Feb. 27/Mar 2	Annelids	<u>Laboratory #8</u> Royal B.C. Museum Field Trip
10	March 6/9	Midterm Exam (covers up to and including Molluscs)	Mid Term Lab Quiz (covers up to and including Molluscs)
11	March 13/16	Arthropods (crabs, lobsters, shrimp (insects, spiders, millipedes, centipedes etc.)	<u>Laboratory</u> #9 Annelids
12	March 20/23	Arthropods (Cont'd.)	<u>Laboratory #10</u> Arthropods
13	March 27/30	Echinodermata Urochordates & minor phyla	<u>Laboratory #11</u> Echinoderms Urochordates & minor phyla
14	April 3/6	Legislation project presentations	<u>Laboratory #12</u> Legislation project presentations
15	April 10/13	TBA Review	TBA Invert Lab Exam

5. Basis of Student Assessment (Weighting)

(a) Assignments:

COSEWIC assignment:	
Invertebrate species review (Critter sheets X2):	10%
Legislation review briefing notes:	5%
Legislation presentations	10%
Class Participation: Labs; Field trips	10%

(b) Exams:

Mid-term lecture exam:	15%
Mid- term Lab exam	5%
Final Laboratory exam:	20%
Final exam:	20%

(c) All exams, quizzes, assignments, labs must be completed and field trip(s) attended to successfully complete the course. Potential absences or late assignments are requested to be discussed prior to scheduled dates.

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
1	Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
cw	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

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

LEARNING 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, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.