

# School of Arts & Science ENVIRONMENTAL TECHNOLOGY DEPARTMENT

ENVR 211-01 BC Biodiversity 1 2006F

# **COURSE OUTLINE**

### The Approved Course Description is available on the web @

 $\Omega$  Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.

#### 1. Instructor Information

(a)	Instructor:	Steve Gormican / Dianne Humphrey		
(b)	Office Hours:	see posted on the office doors		
(c)	Location:	F- 314A / F- 248B		
(d)	Phone:	370 - 3423 / 370 - 3432	Alternative Phone:	Arts and Science Office 370 - 3298
(e)	Email:	gormicans@camosun.bc.ca / humphrey@camosun.bc.ca		
(f)	Website:	www.camosun.bc.ca		

# 2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

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, Algae, Fungi, and Non-Vascular Plants found in B.C.
- 3. Use biological identification keys for selected groups of B.C. Invertebrates, Algae, Fungi, and Non-Vascular Plants and project population estimates of the same
- 4. Sample fresh water and marine habitats, soil, and terrestrial debris in order to determine types of living organisms present.
- 5. Preserve and/or culture various selected Invertebrates, Algae, Fungi (sterile technique), and Non-Vascular Plants.

# 3. Required Materials

		(optional texts)
		Hickman, C.P., L.S. Roberts, A Larson. 2003. <b>Animal Diversity 3<sup>rd</sup> ed.</b> McGraw Hill
(a)	Texts	Kozloff, E. N. 1983. [4th printing 1996 with corrections made in 1993]  Seashore Life of the Northern Pacific Coast. University of Washington Press, Seattle.
		Pojar, J. and A. MacKinnon, eds. 1994. Plants of Coastal British Columbia. Lone Pine Publishing. Vancouver, BC.
(b)	Other	LABORATORY MANUAL Humphrey, D. and S. Gormican. 2006. ENVR 211 - BC Biodiversity 1 Laboratory Manual. Camosun College, Victoria, B.C.

Other suggested but **OPTIONAL** study aids are:

- Borror, D.J. 1960. Dictionary of Word Roots and Combining Forms. Mayfield Publishing Company. Mountain View, California.
- Harding, L.E. and E. McCullum, eds. 1994. Biodiversity in British Columbia: Our Changing Environment. Environment Canada; Canadian Wildlife Service.
- Kozloff, E.N. and L.H. Price. 1996. Marine Invertebrates of the Pacific Northwest. University of Washington Press. Seattle, Washington.
- Van De Graaff, Kent M. and John L. Crawley. 1996. A Photographic Atlas for the Biology Laboratory, 3rd edition. Morton Publishing Company. Englewood, Colorado.

Other text and reference materials may be suggested from time to time. There is a good selection of biology books in the library -- call numbers QH1 to QH631.

# 4. Course Content and Schedule

(Can include: class hours, lab hours, out of class requirements and/or dates for guizzes, exams, lectures, labs, seminars, practicums, etc.)

The schedule which follows is an attempt to outline the weekly activities of the class. It is subject to change or modification as the need arises.

WEEK	DATE	LECTURE TOPICS	LAB TOPICS
1	Sept.5 - 8	Labour Day Holiday Course Introduction; Porifera	Taxonomic Review
2	Sept. 11 -15	Cnidaria; Acoelomates and Pseudocoelomates; Annelids; Molluscs	Sponges and Jellyfish
3	Sept. 18 - 22	Molluscs; Arthropods - Crustaceans	Molluscs and Annelids
4	Sept. 25 - 29	Bryozoans; Brachiopods; Phoronids; Review <b>Midterm Sept. 27</b>	Arthropods – plankton, crabs, shrimp, lobsters
5	Oct. 2 - 6	Arthropods – Spiders and Insects	Arthropods – Spiders and Insects including stream insects
6	Oct. 10 -13	Thanksgiving Holiday Echinoderms	Echinoderms

7	Oct. 16 - 20	Echinoderms; Review; Invertebrate Final Lecture Exam Oct. 18 <sup>th</sup>	Invertebrate Lab Final October 19 <sup>th</sup>
8	Oct. 23 -27	Begin Non-Vascular Plants; Algae	Field Trip Oct 26
9	Oct. 30 - Nov 3	Algae	Marine Algae
10	Nov. 6 - 10 Nov. 11	Algae Remembrance Day Holiday Optional Fungi Field Trip	Fresh Water Algae Optional Low Tide Field Trip - Evening TBA
11	Nov. 13 -17	In lieu Nov. 11 – Monday hol. Fungi; Kingdom Protista Midterm Nov 15	Soil Isolation Diversity of the Fungi
12	Nov. 20 -24	Kingdom Fungi: Zygomycota and Ascomycota	Soil Isolation con't Diversity of the Fungi (continued)
13	Nov. 27 - Dec. 1	Kingdom Fungi: Deuteromycota and Basidiomycota	Diversity of the Fungi Fungal Symbionts
14	Dec. 4 - 8	Fungal Symbionts and Non-Vascular Plants	Non-Vascular Plants
15-16	Dec. 11 -19	NV Plant Lab and Lecture Final	scheduled during this period

Lectures: Wednesday and Thursday 12:30-1:50

Labs: Thursday 9:30 – 11:20

# 5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

(2)	Assignments	Inverts	10%
(a)	Assignments	NV Plants	10%
(b)	Quizzes	Invert Midterm – Sept 27 <sup>th</sup>	10%
(b)		NVP Midterm – Nov 15 <sup>th</sup>	10%
		Exams (Lab and Lecture compo	onent)
	Exams	Invert Final - October 18th Le	c 20%
(c)		- October 19th La	ab 10%
` '		NVP Final – Scheduled Lec	20%
		Lab	10%
(d)	Other		
	(eg, Attendance, Project, Group Work)		

# 6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

# **Standard Grading System (GPA)**

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	Α		8
85-89	A-		7
80-84	B+		6

75-79	В		5
70-74	B-		4
65-69	C+		3
60-64	С		2
50-59	D		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 at **camosun.ca** or information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description		
Incomplete: A temporary grade assigned when the requirement course have not yet been completed due to hardship or extenu circumstances, such as illness or death in the family.			
IP	In progress: A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.		
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.		

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.

# 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 <a href="mailto:camosun.ca">camosun.ca</a>.

#### 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 on the College web site in the Policy Section.

