

ENVIRONMENTAL TECHNOLOGY PROGRAM
ENVR 210: AQUATIC ENVIRONMENTS
WINTER, 2003

Credit: 3

In-class workload: 2 hours lecture; 2 hours lecture/lab (lab component will vary from 1 to 2 hours/week).

Out-of-class workload: 4 hours

Prerequisite: Envr 203

Required Texts:

1. In-house lab manual (Winter, 2003 edition)
2. In-house study guide. (Winter, 2003 edition)

Textbooks on Reserve for Selected Reading:

Introduction to Ocean Sciences. Douglas A. Segar (1998)
Oceanography of British Columbia. R. Thomson
Biological Oceanography. Lalli and Parsons.
Limnology. Horne and Goldman
Limnology. Wetzel.
Limnology. Kalff

Class hours: Tuesday & Wednesday: 1030 - 1220, Room F360

Instructor: Warren Drinnan

Office: Fisher 348D

Office hours: As posted on door.

Office phone (Camosun): 370-3463

Email: drinnan@camosun.bc.ca or wdrinnan @pinc.com (home)

Evaluation: Mid-term exam:20%

Final exam: 35% (includes lab component)

Lab exercises: 30%

Review Paper: 15%

Grading: The correlation between the final percent score and a letter grade is approximately as follows:

A+	95-100%	B-	70-74%
A	90-94%	C+	65-69%
A-	85-89%	C	60-64%
B+	80-84%	D	50-59%
B	75-79%	F	<50%

Mid-Term Exam. The mid-term will be a take-home exam which will require additional texts (on reserve in the library) to complete.

Report. A review paper, on a topic of your choice (a list of suggestions will be made available) is required as one of the out-of-class assignments.

LATE LAB ASSIGNMENTS: Lab assignments are due at class time on Wednesday of the following week. Late assignments will be accepted up to 0830 of the following day; a penalty of 20% of the lab mark will be deducted from the grade. Labs will not be accepted after that time and a mark of "0" will be given.

WEEK	DATES	COURSE MATERIAL0
1	Jan. 07/08	Introduction to Lakes and Oceans (Unit 1) Lake and Ocean Morphology (Unit 2) Lab #1: Bathymetry
2	Jan. 14/15	Charts, Maps and Navigation (Unit 3) Lab #2: Lake Morphology
3	Jan. 21/22	Properties of Water (Unit 4) Thermohaline Circulation (Unit 4) Lab #3: Charts and Navigation (#3A OR #3B)
4	Jan. 28/29	Water Masses Mixing Processes (Unit 5) Lab # 4. Water Masses and T-S Diagrams
5	Feb. 04/05	Atmospheric Circulation and Weather (Unit 6) Surface Circulation (Unit 7) Lab #5. Heat Budget, Wind Bands & Surface Currents
6	Feb. 11/12	Waves (Unit 8) Lab #6 Waves
7	Feb. 18/19	Tides (Unit 9) Estuaries and BC Oceanography (Unit 10) Lab #7 Tides
8	Feb. 25/26	Dissolved Ions and Gases (Unit 11 and Unit 12) Lab # 8. Seasonal Changes in Lakes
9	Mar. 04/05 Mar. 05	Inorganic Carbon and Carbonates (Unit 13) Lab # 9. Saanich Inlet Profiles Mid-term exam due.
10	Mar. 11/12	Nutrients (Unit 14) Lab #10. Nutrient Budget
11	Mar. 18/19	Light (Unit 15) Primary Production (Unit 15) Lab #11. Submarine Light and Primary Production
12	Mar. 25/26 Mar. 26	Phytoplankton/Zooplankton (Units 15/16) Review Paper Due
13	Apr. 01/02	Zooplankton/Secondary Production (Unit 16)
14	Apr. 08/09	Local Marine Issues and Review
15/16	Apr. 15-25	Final exam period. Date to be announced.