### CAMOSUN COLLEGE

# **ENVR 229: QUANTITATIVE ASSESSMENT**

### Course Information - Winter 2010

INSTRUCTOR: Dr. DAVID BLUNDON

OFFICE: Y-304

EMAIL: D2L email only

**CONSULTATION** 

Office hours: Tuesday: 12:30 – 2:20 PM

Wednesday 12:30 - 1:20 PM Thursday 11:30 - 1:20 PM

For an appointment or to leave a message email D2L anytime.

LECTURE / LABORATORY Wednesday (F302: 1:30 - 3:20 PM) / Tuesday (E-110: 9:30 - 12:20 and 2:30 - 5:20 PM)

PREREQUISITE: BIOL 228, ENVR 119 and MATH 216

WEEKLY SCHEDULE: Five hours of lecture and lab and expect to spend an additional 6 hours a week on this course outside of class time.

COURSE TEXTS (no purchases necessary):

• Manly, B. (unpublished). Intoduction to Ecological Sampling .

COMPUTER PROGRAMS (available for use in Ewing computer labs)

• Programs for Ecological Methodology, Version 5.02 by Krebs, C.J. 1998.

PC-ORD

Minitab 2007. Version 15

ADDITIONAL REFERENCE MATERIAL: MATH 216 statistics text

#### **ABSENCES:**

You are responsible for all information (including exam dates and changes in course content or emphasis) covered in class. If you miss an exam you will receive a grade of zero for that exam unless you provide a note from your MD.

#### **ASSIGNMENTS:**

All assignments will submitted by dropbox as WORD documents. Make sure your name and section are included and the document is organized. Please note the cut off dates for the dropbox – submitting a late assignment is not possible.

## LABORATORY INFORMATION:

Make-up labs are not offered. If you are unable to attend your regularly scheduled lab due to illness, contact the instructor. Lab attendance is compulsory. You will lose 5% of your lab mark for each lab period missed.

### MARK DISTRIBUTION:

Lecture/Lab Exams - 45%

Lecture Exam I - 15%
Final Lab Exam - 15%
Week 8: Wednesday, February 24: 2 hours
Week 13: Tuesday, March 30: 3 hours
Lecture Exam II - 15%
Week 14: Wednesday April 7: 2 hours

Assignments - 55% 10 assignments (TBA)

Letter Grades: 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 <50%

Important Dates: Jan. 5 Classes start

Feb. 19 Reading Break

Feb. 20 College Closed (Reading Break)

April 9 Last day of instruction

# LECTURE TOPIC AND LABORATORY TOPICS:

- Introduction to Quantitative Analysis and Review of Descriptive Statistics
- Standard Sampling Methods and Sampling Designs
- Rato Estimation, Regression Estimation and Double Sampling
- Unequal Probability Sampling
- Adaptive Sampling
- Line Transects and Distance Methods
- Removal and Change in Rato Methods
- Plotless Sampling and T-Square Method
- Mark-Recapture Techniques, Removal Methods, Quadrat Counts
- Experimental Designs
- ANOVA, Regression and Multivariate Analysis

