

CAMOSUN COLLEGE
School Of Arts & Science
Environmental Technology

ENVR 140 - Fundamentals of Environmental GIS
Winter 2005

COURSE OUTLINE

The Approved Course Description is available on the web @
<http://www.camosun.bc.ca/schools/artsci/envirotech/courses.php>

1. Instructor Information

- (a) Instructor: Sunjit Bains
- (b) Office hours: W, Th 4:30 - 5:30, Fisher , by appointment
- (c) Location: Young 307
- (d) Phone:
- (e) E-mail: sunbains@hotmail.com

2. Intended Learning Outcomes

The student will be able to:

Create digital data from hard copy manuscripts
Edit data to create topologically correct datasets
Add attribute information to digital data
Use skills learned to perform overlay analysis of data
Perform queries on data using logical and arithmetic expressions
Perform coordinate editing on spatial data
Use skills learned to manage and store digital data

3. Required Materials

- (a) Texts

'Understanding GIS: The Arc /Info method' Version 7.1 for NT.

4. Course Content and Schedule

Section times

Section 1 Wed., Fri. 9:00 - 10:50

Attendance to every class is mandatory. You must notify me with a valid excuse if you cannot attend a class otherwise you will be penalized, as attendance is part of your final grade. **If you miss a class, it is your responsibility to contact instructor regarding missed material and make up what you missed on your own time before the next session, not during the next scheduled class.**

Tutorial Times

Tuesday 4:30 - 5:30 By appointment only
Wednesday 4:30 - 5:30 By appointment only

Note: The tutorial is meant to be for you to work and practice skills or ask for help with specific questions, not for me to re-deliver missed lectures or accompany you through exercises. Use this time to make up for missed classes.

If students do wish to see instructor during the sessions in the lab, please plan to attend promptly in order to ensure that instructor is present and that there is sufficient time to address your question or problem. If you would like to make an appointment to ensure contact with the instructor, please do so via phone or email.

Students in ENVR140 are welcome to come during the ENVR240 classes for help as well. Those times are Tuesday 1:30 – 3:20 and Friday 2:30 – 4:20.

Quizzes

Notification of impending quiz will be given within the prior week.

Students must notify instructor of a forthcoming absence prior to the lab period. This can be done by email or by phone. Failure to notify the instructor in advance of your absence, you will result in a “0” for your quiz. If you are late for a quiz, you will not be given extra time.

Rules for the computer use

Do's

- I No food or drink in the computer lab
- II Bring your text to every session
- III Attend tutorial sessions if you need extra help.
- V You will be assigned space on the server for storage of your files. This space is finite and must be used for this class only. Only GIS course work is permitted in this lab.

Don'ts

- I No food or drink of any kind in the lab
- II No computer games
- III Don't skip classes. If you are unable to attend class you must make up the material before the next session. Attend tutorial sessions for this purpose.

Course Objectives

Upon completion of this course the successful student should be able to:

- Explain the process followed in the creation and use of resource maps, data input, data extraction, and map modeling based upon attribute information.
- Use **ARC/INFO** tools for 'workspace' management
- Understand nomenclature and terms commonly used in GIS
- Select suitable input device for spatial data input and editing
- Digitize spatial information to the proper levels of accuracy
- Explain topology and use Clean and Build functions to create topology
- Edit maps to create an errorless spatial map
- Use analysis functions of buffer, overlay etc.
- Create final map plots to for reports
- Use **INFO** database manager for attribute data input and editing

5. Basis of Student Assessment (Weighting)

Item	Value	Comments
Assignments and Projects	25%	Small assignments and term project
Instructor's Assessment	5%	Based on attendance and class participation
Quizzes	30%	At the end of each Chapter, written and practical
Final Examination	40%	Both written (closed book) and practical (open text book)
Sum	100%	

(a) Assignments

- Assignments submitted to instructor after due date will have marks deducted. If assignments have been graded and returned to the class, no grade will be given.

(b) Quizzes

- Students must notify instructor of a forthcoming absence prior to the lab period. This can be done by email or by phone. Failure to notify the instructor in advance of your absence, you will result in a "0" for your quiz.
- If you are late for a quiz, you will not be given extra time.

(c) Exams

- A mark of 50% must be attained on class work in order to pass the course. Otherwise an F will be awarded.
- Students must attain a "C" in order to proceed to next course.

(d) Other (e.g. Project, Attendance, Group Work)

- Full attendance at the lab sessions is mandatory
- Each absence will result in loss of "instructor's assessment" marks
- Late arrivals greater than 20 minutes will be considered an absence.

6. Grading System

The following percentage conversion to letter grade will be used:

A+ = 95 - 100%	B = 75 - 79%	D = 50 - 59%
A = 90 - 94%	B- = 70 - 74%	F = 0.0 - 49%
A- = 85 - 89%	C+ = 65 - 69%	I = See Calendar for Details
B+ = 80 - 84%	C = 60 - 64%	AUD = Audit

W = Official withdrawal has taken place.

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, Registrar's Office or the College web site at <http://www.camosun.bc.ca>

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/2-8