CAMOSUN COLLEGE
School Of Arts & Science
Environmental Technology

ENVR 240 - Fundamentals of Environmental GIS
Fall 2004

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: Sharene Foord (Trisha Jarrett will be available as a substitute)

(b)

(c) Location: Young 307

(d) Phone: Sharene – 370-3434
Alternative: Trisha - 370-3426

(e) E-mail: sharenef@shaw.ca or Jarrett@Camosun.bc.ca

(f) Website:

2. Intended Learning Outcomes

The student will 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.
Understand nomenclature and terms commonly used in GIS
Build on spatial data input and editing, create topology, and use analysis functions.
Apply GIS concepts learned in ENVR 140 to projects using ArcView and ArcGis Workstation.
Prepare students for using GIS in working applications.
Become familiar with other GIS data formats – raster and image data
Prepare students for using GIS in a working environment.

3. Required Materials

(a) Texts

The ENVR240 lab manual is required and can be purchased from the bookstore for $15.

The ENVR140 text, 'Understanding GIS: The Arc /Info method'   Version 7.1 for NT is
recommended.
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4. Course Content and Schedule

Prerequisites:
1. Basic computer skills – file management and navigation through directories
2. Completion of ENVR140 and ENVR112 – grasp of basic skills and terminology is mandatory, independent review may be necessary

Section times
Tues. 1:30 – 3:20
Fri.   2:00 – 3:50

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 make up what you missed on your own time before the next session, not during the next scheduled class.** Priority will be given to helping students who attended last class and are working on current tasks.

Tutorial Times
Friday   3:30 - 5:30 Y307

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, or arrange for help at a different time, please do so via phone or email.

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

Rules for the computer use
Do's
I   Attend tutorial sessions if you need practice or extra help
II   You will be assigned space on the hard drive for storage of your files. Do all class work on the D:\ drive and move work back to P:\ after each class. Lost data is not the responsibility of the computer lab or instructor.
III   Maintain a current copy of metadata for all of your files – this is very important, as you will need to keep track of all your work. Use NT Explorer to assist you.

Don'ts
I   No food or drink of any kind in the lab
II.   No computer games
III   No working on other classes or personal computer use during class unless all assigned work is completed. Browsing the Internet or writing emails or working on assignments during lectures will not be tolerated.
IV   Use of printers for any other class or personal work is not permitted and will result in being blocked from using them.

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
- ❑ Explain topology and use Clean and Build functions to create topology
- ❑ 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 Tests	30%	These will include small take-home and in-class assignments. May also include quizzes. If you do not attend, you will be given "zero". If you are late, you will not be given extra time.
Term Project	35%	Larger report(s) and collection of digital files assigned during the last weeks of the semester
Final Exam	30%	Both written (1 page of notes) and practical
Instructor's Assessment	5%	Based on attendance and class participation
Total	100%	

(a) Assignments
- ❑ Assignments are always due at the beginning of class unless otherwise specified.
- ❑ Assignments submitted to instructor after due date will have marks deducted at a rate of 10% per day. If assignments have been graded and returned to the class, no grade will be given.
- ❑ All assignments and projects must be typed. **No hand-written papers will be accepted.**

(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.

(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.
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> www.camosun.bc.ca/divisions/pres/policy/2-education/2-8