

School of Arts & Science ENVIRONMENTAL TECHNOLOGY DEPARTMENT

ENVR 112-01 Introduction to GIS 2006F

COURSE OUTLINE

The Approved Course Description is available on the web @

http://www.camosun.bc.ca/schools/artsci/envirotech/courses.php

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

(a)	Instructor:	Dean Hardman		
(b)	Office Hours:	TBA		
(C)	Location:	Fisher 246		
(d)	Phone:	370 - 3210	Alternative Phone:	
(e)	Email:	HardmanD@camosun.bc.ca		
(f)	Website:			

1. Instructor Information

2. Intended Learning Outcomes

(<u>No</u> 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. Demonstrate an understanding of basic concepts in Geographic Information Systems (GIS), including spatial data, spatial data models, attribute data management and data analysis.
- 2. Demonstrate an ability to handle spatial data through the application of GIS software, including the preparation of digital maps.
- 3. Demonstrate an understanding of the application of GIS to solve environmental problems.

3. Required Materials

(a)	Texts	
(b)	Other	There is no text required. You must purchase a copy card from the bookstore that will go towards the copying of reference materials for the course.
		You will be completing a lab-based tutorial during the labs of this class – this information can be used for reference for other assignments.

4. Course Content and Schedule

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

Prerequisites:

- 1. Basic computer skills file management and navigation through directories
- 2. Comfort with the Internet

Section times

Lab A	Monday and Tuesday 10:30 – 11:50
Lab B	Monday and Tuesday 12:00 – 1:20

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.

By appointment

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.

Do's

- I Attend tutorial sessions if you need practice or extra help
- II You will be assigned space on the data server for storage of your files. Lost data is not the responsibility of the computer lab or instructor.

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.

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

- Use the Internet to explore GIS.
- Use Internet mapping tools to explore, query and map spatial data
- Understand nomenclature and terms commonly used in GIS
- Use ArcView3.3 to assess, query, edit, analyze and map spatial data
- Use ArcView Help to assist you in the tasks listed above.

5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

ltem	Value	Comments
Module Quizzes	20%	Based on best 5 out of 6 total quizzes. If you do not attend, you will be given "zero". If you are late, you will not be given extra time.
Assignments	15%	These will include small take-home and in-class assignments.
Final Project	30%	Larger report(s) and projects
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.
 - If you are absent the day an assignment is due, it is your responsibility to make arrangements with the instructor **prior** to the class, or late penalties will apply.

If you are absent the day a project is assigned, it is your responsibility to contact the instructor and get the assignment and information, etc.

6. Grading System

(<u>No</u> 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	А		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	0-49	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		
I	<i>Incomplete</i> : A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.		
IP	<i>In progress</i> : 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	<i>Compulsory Withdrawal:</i> 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 <u>camosun.ca</u>.

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.

ENVR 112 Fundamentals of Environmental GIS

Week	Monday Lecture Topic	Tuesday Lecture Topic	Weekly Lab Topic
Sept. 5	Labour Day – Holiday	Course overview and administration	Introduction to Labs
Sept. 11	Module 1: Basics of ArcView, Parts 1 – 3	Module 1: Basics of ArcView, Parts 4 – 5	Exercise 1.a
Sept. 18	Module 1: Basics of ArcView, Parts 6– 9	Assignment 1: Website review Module 2: Querying Data in ArcView , Parts 1–2	Exercise 1.b, Exercise 2.a
Sept. 25	Module 2: Querying Data in ArcView , Parts 3-4	Module 2: Querying Data in ArcView , Parts 3-4	Exercise 2.a, Exercise 2.b
Oct. 2	Module 3: Working with Tables in ArcView, Parts 1 – 2	Module 3: Working with Tables in ArcView, Parts 3 – 4	Exercise 3.2, Exercise 3.3
Oct. 9	Thanksgiving – Holiday	Module 3: Working with Tables in ArcView, Parts 3 – 4	Exercise 3.4
Oct. 16	Assignment 2 – Downloading and assessing data	Module 4: Analyzing Spatial Relationships Using ArcView, Part 1	Exercise 4.1
Oct. 23	Module 4: Analyzing Spatial Relationships Using ArcView, Part 2 – 4	Module 4: Analyzing Spatial Relationships Using ArcView, Part 2 – 4	Exercise 4.2, 4.3
Oct. 30	Module 4: Analyzing Spatial Relationships Using ArcView, Part 5–6	Assignment 3– Natural Areas Atlas	Exercise 4.6 ,Exercise 5.3, Exercise 5.4
Nov. 6	Module 5: Presenting Information in ArcView, Part 1– 3	Module 6 Creating Your Own Data in ArcView, Part 3 -4	Exercise 6.2, Exercise 6.4,
Nov. 13	Remembrance Day Observed – Holiday	Module 6: Creating Your Own Data in ArcView, Part 5	Exercise 6.5
Nov. 20	Assignment 4 – Final Project	Assignment 4 – Final Project	Assignment 4 – Final Project
Nov. 27	Assignment 4 – Final Project	Assignment 4 – Final Project	Assignment 4 – Final Project
Dec. 4	Review	Final Exam	