

School of Arts & Science SOCIAL SCIENCES DEPARTMENT

GEOG 214-section Digital Geomatics Semester/Year, eg, 2008F or 2008Q1

COURSE OUTLINE

The Approved Course Description is available on the web @ _____

 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.

1. Instructor Information

(a)	Instructor:	Catherine Griffiths	
(b)	Office Hours:	Wed 12:30 – 1:20 and Fri 12:30 – 1:20	
(C)	Location:	Paul 233 (W) and Ewing 110 (F)	
(d)	Phone:	370-3370	Alternative Phone:
(e)	Email:	Griffiths@camosun.bc.ca	
(f)	Website:	Griffiths.disted.camosun.bc.ca	

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 the basic concepts in digital geomatics, including concepts in GIS, digital mapping and database systems, and digital remote sensing.
- 2. Demonstrate an ability to handle spatial data through the application of GIS software and the use of remote sensing data.

3. Required Materials

- (a) Texts: An Introduction to GIS, Heywood, I., S. Cornelius and S. Carver. 2006 Pearson Prentice Hall.
- (b) Other: Lab materials and additional information online.

4. Course Content and Schedule

Lectures: There will be 2 hours of lecture per week. The lectures will include PowerPoint, Overheads and traditional lecture material. There will be an in class discussion each week to further expand the concepts.

Labs: There are 10 labs in this course. Each lab is worth 3% for a total of 30% of the final mark. All labs are held in the general computing lab – Ewing 110. Attendance is

mandatory for lab sessions. Contact with instructor prior to lab session is required for alternate arrangements otherwise a mark of zero will be assigned.

Project: There is one group project in this course due at the end of term. This will be worth 10% of the final mark.

Examinations: There are 3 exams during this course. There are 2 midterms during class time. Each is worth 15% for a total of 30% of your final mark. The final exam is cumulative and is worth 30% of your final mark.

Date	Week	Lecture - Wednesdays	Lab - Fridays	Readings
Sept 3-5	1	Introduction to course - the basics	Introduction to labs - Virtual Campus Getting Started with GIS	
Sept 10- 12	2	What is GIS? History of GIS	Lab 1: Tutorial - Quick Start	Chapter 1 and 9
Sept 17- 19	3	Spatial Data and Data Quality Projections and scale	Lab 2: Paper to Digital: SVI	Chapter 2
Sept 24- 26	4	Map Output	Lab 3: GPS to GIS - Jasper?	Chapter 8
Oct 1-3	5	Quiz 1	Project topics and Lab 4: Census data online	
Oct 8-10	6	Spatial Data Modeling & Project Design	Lab 5: Forest - Trail	Chapter 3
Oct 15- 17	7	Database: Gathering and Input	Lab 6: Census Data linking data to maps	Chapter 4 & 5
Oct 22- 24	8	Data Analysis	Lab 7: Buffer: Airfield SSI	Chapter 6
Oct 29- 31	9	Analysis and Modeling	Lab 8: MCE - Choosing a location	Chapter 7
Nov 5-7	10	Quiz 2	Project work: data acquisition, topic by today and sign up for time	
Nov 12- 14	11	Introduction to Remote Sensing	Lab 9: Aerial Photos and GIS	NRCAN RS101, Tutorial 1, 2
Nov 19- 21	12	Satellite Imagery	Lab 10: Decision Making and Remote Images	NRCAN RS101, Tutorial 4
Nov 26- 28	13	Ethics/Future of GIS	Project work: data output and presentations	Chapter 11 & 13
Dec 3-5	14	Review and catch-up	Presentations	

Course Schedule:

5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

- (a) Laboratory exercises: 10 @ 3% = Total 30%
- (b) Quizzes: 2 midterms @ 15% = Total 30%

- (c) Exams: Final = 30%
- (d) Other (e.g., Attendance, Project, Group Work) Project = 10%

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.)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	А		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Standard Grading System (GPA)

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 E-1.5 at **camosun.ca** for 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, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
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.

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.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED