GEOGRAPHY 328: GIS ANALYSIS

DEPARTMENT OF GEOGRAPHY, UNIVERSITY OF VICTORIA

Course outline – Winter 2016

GENERAL INFORMATION

Adam Wicks
Sessional Office: DTB B214
Email: awicks@uvic.ca

Office hours: TBD
or by appointment

Lecture Information:
Time: Tues, Wed – 11:30 - 12:20
Location: COR A229

Laboratory Information *(Section, Weekday, Time, Location, Instructor)*

B01	T	12:30 – 14:20	DTB A251	Jessica Fitterer
B02	R	14:30 – 16:20	DTB A253	Jacolby Giuseppini
B03	F	11:30 – 13:20	DTB A253	Jessica Fitterer

Contact information for TAs will be provided on CourseSpaces.

COURSE DESCRIPTION

This course focuses on analysis for digital mapping and modelling, developing and using geographic data to answer spatial research questions.

In this course we will cover a variety of topics including but not limited to: Spatial Analysis Building Blocks, Surface Analysis, Terrain Analysis, Spatial Interpolation, Suitability Analysis and Modelling in GIS.

COURSE OBJECTIVES

1. To understand the capabilities and limitations of GIS
2. To know how to solve spatial problems (theoretically and practically) using GIS
3. Communicate GIS issues and solutions
4. To read and write about GIS

PREREQUISTIES

GEOG 222 and GEOG 228
and one of GEOG 226, STAT 255, 260

EVALUATION CRITIERIA

Labs (5) = 50% (10% each)
Term Tests = 20%
Final Exam = 30% - Date/Time TBA

Exam format will include a combination of short-answer and multiple-choice questions. The questions for the term test and final exam will be based on lectures, assigned readings, learning resources and class discussion. The term test will cover only the topics discussed immediately preceding it. The final exam is comprehensive, although may be weighted more heavily on material not previously tested on.

FINAL GRADE ALLOCATION

A+	A	A-	B+	B	B-	C+	C	D	F
90-100%	85-89%	80-84%	77-79%	73-76%	70-72%	65-69%	60-64%	50-59%	<49%

COURSE READINGS AND LEARNING RESOURCES

Assigned readings for this course will come from a free online e-resource entitled, **Geospatial Analysis - 5th Edition, 2015 by: de Smith, Goodchild, Longley.**

http://www.spatialanalysisonline.com/HTML/index.html

In addition a list of supplemental readings and learning materials will be posted on CourseSpaces.

If you are interested, the recommended print textbook for this course is:
Chang, K. T. (2015). Introduction to Geographic Information Systems (8th ed) New York: McGraw-Hill (available at the bookstore)

COURSE COMMUNICATION

CourseSpaces learning management systems (LMS) will serve as the main avenue of communication in this course (http://coursespaces.uvic.ca). Please monitor the page on a regular basis for course announcements, readings assignments and lecture handouts. If you are having difficulty logging in or password problems, contact the Computer Help Desk Email: helpdesk@uvic.ca, Tel: 250-721-7687

LECTURE HANDOUTS

Topic handouts *based* on lecture presentations will be provided. They will be posted on CourseSpaces before the next lecture. Topic handouts will be removed *7 days after the posting date.* Students are responsible for downloading/saving and completing notes packages. If you miss any material, make arrangements to get handouts from a fellow student, not from the instructor.

IMPORTANT COURSE POLICIES

- Students must complete all evaluation components to obtain credit
- You must obtain a passing grade (i.e., ≥ 50%) in both the lecture and lab components to pass the course
- Failure to complete an assignment or exam (midterm or final), without permission from the instructor, will result in an 'N' grade, which equals a Grade Point Value of 0
- Unless otherwise stated students are expected to complete assignments independently.
- Conflicts with holidays or travel plans are not considered an acceptable reason to apply for a deferred examination or an assignment extension.

Missed exams:

- Students will not be permitted to write make-up tests except for documented medical or compassionate reasons. Please inform the instructor of your situation promptly and present written proof within five working days.
- Any make-up test or examination may not follow the same format as the in-class one.

Assignments:

- Late assignments/papers will be penalized **20% per day** (including weekends and holidays). Exceptions will only be granted for documented medical or compassionate reasons. Written proof must be provided within five working days. **Only the course instructor can grant exceptions.**
- Lab assignments are due at the beginning of your lab session.
- Details regarding your labs and their marks are managed by the course TA. Please discuss any issues on labs with your TA first.

- Please attend only the laboratory section for which you are registered. If you must miss a lab for exceptional circumstances please make arrangements with your TA in advance to attend another section.

STUDENT RESPONSIBILITIES

- A high level of student cooperation and participation, involving asking and answering questions during the lectures.
- *Cell phones and portable music players must be turned off or silenced during lectures. Students are also required to remove earphones.*
- Students are expected to be punctual for classes.
- Students are expected to attend all lectures and take notes. Not all material provided in the lecture handouts is covered in assigned readings and learning resources. In addition, not all assigned readings and learning resources will be covered in the lectures but may be covered in the exams.

CLASS CLIMATE

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members. The University of Victoria has made a conscientious effort to increase diversity in the student, staff and faculty member populations. To ensure that all class members feel welcomed and equally able to contribute to class discussions, we will all endeavour to be respectful in our language, our examples, and the manner in which we conduct our discussions and group work. If you have any concerns about the climate of the class, please contact me.

ACADEMIC INTEGRITY

Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Victoria. *The responsibility of the institution:* Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects. *The responsibility of the student:* Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations or for referencing your sources, ask your instructor.

Infractions will be dealt with in accordance with University policy. Commonly, the penalty for any form of cheating/plagiarism is a grade of F on the tests or laboratory assignments, or a final grade of F in the course. However, depending on the severity of the case other penalties may include a record on the student's transcript or expulsion.

Please familiarize yourself with the University policy on academic integrity found in the Undergraduate Calendar at the following website. Please contact me if your have any questions. (http://web.uvic.ca/calendar2011/FACS/UnIn/UARe/PoAcI.html)

STUDENTS WITH DIVERSE LEARNING STYLES AND NEEDS

If you have any type of disability/health consideration, there are support systems, resources, and accommodation actions available to you. If you wish to access any of these supports, resources or accommodations, I encourage you to contact the Resource Centre for Students with a Disability (http://www.uvic.ca/services/rcsd/) to ensure your success in this course. Please note that you are under no obligation to disclose your disability/health consideration.

COURSE EXPERIENCE SURVEY

I value your feedback on this course. Towards the end of term, as in other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, table, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

TENTATIVE LECTURE SCHEDULE*

Week	*Dates*	*Lecture Topic*
Week 1	Sept. 5 - 9	Topic 1: Introduction and Review
Week 2	Sept. 12 - 16	Topic 2: Spatial analysis building blocks
Week 3	Sept. 19 - 23	Topic 2: Continued Topic 3: Terrain mapping and analysis
Week 4	Sept. 26 - 30	Topic 3: Continued
Week 5	Oct. 3 - 7	Topic 4: Modelling in GIS
Week 5	Oct. 10 - 14	Topic 4: Continued
Week 6	Oct. 17 - 21	Mid-Term Test
Week 7	Oct. 24 - 28	Topic 5: Interpolation
Week 8	Oct. 31 - Nov. 4	Topic 5: Continued
Week 9	Nov. 7 - 11	Reading Break
Week 10	Nov. 14 - 18	Topic 6: Special topics in research
Week 11	Nov. 21 - 25	Topic 6: Continued
Week 12	Nov. 28 - Dec. 2	*Review, Course Evaluation*

Final Exam during exam period (Date TBA)

** dates and topics may change*

GEOG 328 - LAB INFORMATION

LAB MANUAL ACCESS

http://labs.geog.uvic.ca/geog328/
username: geog328 password: gis328

LAB ACCESS POLICY

The lab is open Monday through Friday from 8:30 am to 6:30 pm. For evenings and weekends and after-hours a key can be signed out from Rick Sykes.

You will have space on our servers to complete assignments – only materials relating to GEOG 328 can be stored – no personal or private material allowed.

LAB ASSIGNMENT SCHEDULE

Week	*Dates*	*Lab*	*Due*
Week 1	Sept. 5 - 9	No lab	
Week 2	Sept. 12 - 16	Lab 1 - Projections and Queries	
Week 3	Sept. 19 - 23	Lab 1 - Continued	
Week 4	Sept. 26 - 30	Lab 2 - Data Collection	Lab 1
Week 5	Oct. 3 - 7	Lab 2 - Continued	
Week 5	Oct. 10 - 14	Lab 3 - Terrain Analysis	Lab2
Week 6	Oct. 17 - 21	Lab 3 - Continued	
Week 7	Oct. 24 - 28	Lab 4 – Raster Analysis (Least Cost Path)	Lab 3
Week 8	Oct. 31 - Nov. 4	Lab 4 - Continued	
Week 9	Nov. 7 - 11	Reading Break	
Week 10	Nov. 14 - 18	Lab 5 - Interpolation	Lab 4
Week 11	Nov. 21 - 25	Lab 5 - Continued	
Week 12	Nov. 28 - Dec. 2	No lab	Lab 5

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