



COURSE OUTLINE
Introduction to Maps and GIS

Contact: fargey@uvic.ca or 250-721-7342
Office Location: DTB B308
Office Hours: Tuesdays 2:30 to 3:30 pm, Fridays 9:30 am to 12:00 pm *or by appointment*
Class Meetings: Mondays and Thursdays 12:00 to 12:20 pm
Location: David Turpin Building A102

Lab Information:

| | | | |
|-----|-----------|---------------------|----------|
| B01 | Monday | 1:00 – 2:50 pm | DTB A251 |
| B02 | Tuesday | 8:30 – 10:20 am | DTB A251 |
| B03 | Tuesday | 10:30 am – 12:20 pm | DTB A251 |
| B04 | Tuesday | 2:30– 4:20 pm | DTB A251 |
| B05 | Wednesday | 8:30 – 10:20 am | DTB A251 |
| B06 | Wednesday | 10:30 am – 12:20 pm | DTB A251 |
| B07 | Wednesday | 2:30– 4:20 pm | DTB A251 |

TA information posted on CourseSpaces

COURSE DESCRIPTION

This course introduces techniques and fundamentals of spatial data and analysis. Throughout the term students will be introduced to fundamentals in Geographic Information Systems, different types of maps and map readings, and GIS Applications, while also gain familiarity with GIS software.

LEARNING OUTCOMES

1. Ability to complete continuous and discrete geo-referencing
 2. Ability to read and calculate scales
 3. Ability to understand, evaluate and select suitable map projections
 4. Ability to classify geographic information
 5. Describe how GIS can be used to solve problems
 6. Ability to explore GIS data, Metadata and Maps
 7. Ability to perform attribute queries
 8. Perform basic vector and raster analysis
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REQUIRED TEXT

Assigned readings for this course will come from a free online e-resource entitled:
GIS Commons: An Introductory Textbook on Geographic Information Systems
<http://giscommons.org>

Additional readings and learning resources will be provided throughout the course.

EVALUATION

| | |
|-------------------------------------------------------------------------------------------|-----|
| Midterm Exam (Oct 13 th in class) | 15% |
| Final Exam (Exam period) | 40% |
| Laboratory Assignments x 7 | 30% |
| <i>Lab 1 (4%), Lab 2 (4%), Lab 3 (4%), Lab 4 (4%), Lab 5 (5%), Lab 6 (5%), Lab 7 (4%)</i> | |
| Laboratory Exam (week of Nov 21-25) | 15% |

Exam Format: The questions for the midterm exam and final exam will be based on lectures, readings and class discussion. The midterm test will cover only the topics discussed immediately preceding it. The final exam is comprehensive, but will be weighted more heavily on material not previously tested on. Format includes a combination of short-answer and multiple-choice questions. The lab exam questions will be based on lab assignments, background material and lab discussions.

GRADING SYSTEM

As per the Academic Calendar:

| Grade | Grade point value | Grade scale | Description |
|-----------|-------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A+ | 9 | 90-100% | Exceptional, outstanding and excellent performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter. |
| A | 8 | 85-89% | |
| A- | 7 | 80-84% | |
| B+ | 6 | 77-79% | Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area. |
| B | 5 | 73-76% | |
| B- | 4 | 70-72% | |
| C+ | 3 | 65-69% | Satisfactory, or minimally satisfactory. These grades indicate a satisfactory performance and knowledge of the subject matter. |
| C | 2 | 60-64% | |
| D | 1 | 50-59% | Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter. |
| F | 0 | 0-49% | Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental. |
| N | 0 | 0-49% | Did not write examination or complete course requirements by the end of term or session; no supplemental. |

GEOGRAPHY DEPARTMENT INFORMATION

Geography Department website: <http://geog.uvic.ca>

Undergraduate Advisor: Dr. Phil Wakefield geogadvisor@uvic.ca

Department Chair: Dr. Johan Feddema geogchair@uvic.ca

COURSESPACES

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

IMPORTANT COURSE POLICIES

A high level of student cooperation and participation, involving asking and answering questions is expected. Students are expected to attend all lectures, take notes and be punctual for class.

Cell phones and portable music players must be **turned off or silenced** during lectures.

Topic handouts based on lecture presentations will be provided before the beginning of class meetings on CourseSpaces. These 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.*

Students must complete all evaluation components to obtain credit. Failure to complete an any evaluation component without permission from the instructor, will result in an 'N' grade, which equals a Grade Point Value of 0.

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.

Lab assignments are due at the beginning of your lab section, thereafter late penalties will be applied.

Late assignments 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.*

Details regarding your labs and their marks are managed by the course TAs. Please discuss any issues or questions 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. This however does not change the due date of your lab assignment.

Conflicts with holidays or travel plans are not considered an acceptable reason to apply for a deferred examination or an assignment extension.

Unless otherwise stated students are expected to complete assignments **independently**.

PLAGIARISM

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 you have any questions.

<http://www.uvic.ca/learningandteaching/students/resources/expectations/>

ACCESSIBILITY

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability/health consideration that may require accommodations, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCSD) as soon as possible. The RCSD staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <http://rcsd.uvic.ca/>. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

POSITIVITY AND SAFETY

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members. 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.

Course Experience Survey (CES)

We value your feedback on this course. Towards the end of term, as in all 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 help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, 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.

Course Information

Lecture and Lab Information

| Week | Dates | Tentative Lecture Schedule | Lab Information |
|------|-----------------|-------------------------------------------------------------------------------|----------------------------------------------------------|
| 1 | Sept 5 to 8 | Introductory Concepts, Topic 1: Map Projections, Coordinate Systems and Scale | No Lab |
| 2 | Sept 12 to 15 | Topic 1 Continued, Topic 2: Geographic Data | Lab 1: Coordinate Systems, Map Projections and Scale |
| 3 | Sept 19 to 23 | Topic 2: Continued, Topic 3 Queries | Lab 2: Introduction to ArcGIS <i>Lab 1 Due</i> |
| 4 | Sept 26 to 30 | Topic 3: Continued, Topic 4: Proximity/Buffer | Lab 3: Attribute and Spatial Queries <i>Lab 2 Due</i> |
| 5 | Oct 3 to 6 | Topic 5: Spatial Queries and Data transformations, Midterm Review | Lab 4: Buffer <i>Lab 3 Due</i> |
| 6 | Oct 10 to 13 | <i>Oct 10 No class (Thanksgiving), Midterm Oct 13th</i> | No Labs |
| 7 | Oct 17 to 20 | Topic 5 Continued, Topic 6: Raster Analysis | Lab 5: Overlay <i>Lab 4 Due</i> |
| 8 | Oct 24 to 27 | Topic 6 Continued, Topic 7: Network Analysis | Lab 6: Raster Analysis <i>Lab 5 Due</i> |
| 9 | Oct 31 to Nov 3 | Topic 7 Continued, Topic 8: GIS Applications (GPS) | Lab 7: Network Analysis <i>Lab 6 Due</i> |
| 10 | Nov 7 to 10 | Topic 8: GIS Applications (GPS), <i>Nov 10 - No class (Reading Break)</i> | Reading Break – No labs |
| 11 | Nov 14 to 17 | Topic 8: GIS Applications (Cartography) | Lab Exam review |
| 12 | Nov 21 to 24 | Topic 8: GIS Applications (Terrain Analysis) | Lab Exam |
| 13 | Nov 28 to Dec 1 | Topic 8: GIS Applications (ArcGIS Online) and Review! | No Lab |

**October 31st – Last day for withdrawing from the first term courses without penalty of failure.*

LAB ACCESS POLICY

The lab is open Monday through Friday from 8:30 am to 6:30 pm.

You will have space on our servers to complete assignments – only materials relating to GEOG 222 can be stored – no personal or private material allowed

Please familiarize yourself with the University policy on academic integrity found in the Undergraduate Calendar at the following website. Please contact me if you have any questions.

(<http://web.uvic.ca/calendar2011/FACS/UnIn/UARe/PoAcl.html>)