## **GEOGRAPHY 222: Introduction to Maps and GIS**

# DEPARTMENT OF GEOGRAPHY, UNIVERSITY OF VICTORIA Course outline – Spring 2016

## **GENERAL INFORMATION**

Dr. Shannon Fargey Office: DTB B308

Email: fargey@uvic.ca Tel: 250-721-7342

Office hours: Monday 10:00 am to 12:00 pm

Wednesday 10:00 am to 12:00 pm

or by appointment

## **Lecture Information:**

Time: Mon, Thurs -2:30 pm -3:20 pm

Location: COR B108

## Laboratory Information (Section, Weekday, Time, Location)

| B01 | M | 3:30 pm - 5:20 pm   | DTB A251 |
|-----|---|---------------------|----------|
| B02 | T | 10:30 am - 12:20 pm | DTB A251 |
| B03 | W | 8:30 am - 10:20 am  | DTB A251 |
| B04 | F | 1:30 pm - 3:20 pm   | DTB A251 |

Contact information for TAs will be provided on CourseSpaces.

## **COURSE OBJECTIVES**

- Introduce fundamentals of geographic information
- Introduce different types of maps and map reading
- Introduce Geographic Information Systems
- Gain familiarity with GIS software
- Introduce digital mapping
- Introduce GIS applications

#### **LEARNING OUTCOMES**

- Ability to complete continuous and discrete geo-referencing
- Ability to read and calculate scales
- Ability to understand, evaluate and select suitable map projections
- Ability to classify geographic information
- Describe how GIS can be used to solve problems
- Ability to explore GIS data, metadata and maps
- Basic digital GIS skills
- Ability to perform attribute queries
- Basic Vector and Raster analyses

## **EVALUATION CRITIERIA**

Labs (7) = 30%

Midterm Exam (February 18<sup>th</sup>)= 15%

Lab Exam (week of March 14<sup>th</sup>) = 15%

Final Exam = 40% - Date/Time TBA (University exam period)

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

Electronic devices for use during exams are limited to non-graphing scientific calculators unless otherwise expressly permitted by the course instructor.

## FINAL GRADE ALLOCATION

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

#### COURSE READINGS AND LEARNING RESOURCES

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

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

#### **COURSE COMMUNICATION**

CourseSpaces learning management systems (LMS) will serve as the main avenue of communication in this course (<a href="http://coursespaces.uvic.ca">http://coursespaces.uvic.ca</a>). 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: <a href="https://helpdesk@uvic.ca">helpdesk@uvic.ca</a>, Tel: 250-721-7687

## LECTURE HANDOUTS

Topic handouts *based* on lecture presentations will be provided on CourseSpaces. I will try to make them available the beginning of class. 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.

### IMPORTANT COURSE POLICIES

- Students must complete all evaluation components to obtain credit
- 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.

## Lab Assignments:

- Students submitting labs late will be penalized. The initial penalty is 25%; every day thereafter you will lose an additional 25% 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. This however does not change the due date of
  your lab assignment.

## 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 (<a href="http://www.uvic.ca/services/rcsd/">http://www.uvic.ca/services/rcsd/</a>) 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.

#### LAB INFORMATION

## LAB MANUAL ACCESS

http://labs.geog.uvic.ca/geog222/

username: geog222 password: map222

## 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.

## LAB ASSIGNMENT SCHEDULE

| Week, Date, Schedule    |  |
|-------------------------|--|
| Week 1: Jan 4-8         | No Lab   |
| Week 2: Jan 11-15       | Lab 1: Map Projection, Coordinate Systems, Scale   |
| Week 3: Jan. 18-22      | Lab 2: Introduction to ArcGIS (Lab 1 – Due)        |
| Week 4: Jan. 25-29      | Lab 3: Attribute and Spatial Queries (Lab 2 – Due) |
| Week 5: Feb. 1-5        | Lab 4: Buffers (Lab 3 – Due)                       |
| Week 6: Feb. 8-13       | Reading break – No Labs                            |
| Week 7: Feb. 15-19      | Lab 5: Overlay (Lab 4 – Due)                       |
| Week 8: Feb. 22-26      | Lab 6: Raster Analysis (Lab 5 – Due)               |
| Week 9: Feb. 29-Mar. 4  | Lab 7: Network Analysis (Lab 6 – Due)              |
| Week 10: Mar. 7-11      | Lab Review (Lab 7 – Due)                           |
| Week 11: Mar 14-18      | LAB EXAM   |
| Week 12: Mar 21-25      |  |
| Week 13: Mar. 28-Apr. 1 |  |

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Labs (7) = 30% (see weights below)
Lab 1 (4%), Lab 2 (4%), Lab 3 (4%), Lab 4 (4%), Lab 5 (5%), Lab 6 (5%), Lab 7 (4%)
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