

GEOG 5803 – Seminar in Geomatics
Course Outline
Winter 2014
Department of Geography and Environmental Studies

Instructor: Scott Mitchell, B359 Loeb Building
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Office Hours: Tuesdays 10:00-11:00, Thursdays 14:00-15:00, or by appointment

Course calendar: Seminars: Thursdays 8:30-11:30 Loeb A220 (or A237 by arrangement)

Course description: This course typically covers at least these broad themes:

- **Issues around the use of and access to spatial data and algorithms,**
- **Advanced sensors and calibration or correction,**
- **Recent developments in spatial data analysis techniques, including spectral, spatial, temporal and/or uncertainty analysis, and**
- **Interfacing environmental models with spatial databases**

The exact distribution of topics varies each year, however, as a function of the guest speakers available, and the backgrounds and interests of the students that enrol. Potential participants are welcome to contact me beforehand to discuss this further.

Evaluation:

Student assessment will be split as follows:

- seminar participation (5%)
- project proposal (5%)
- seminar presentation(s) (one or two, depending on number of students) (35%)
- journal article review (15%)
- final project (40%).

The seminars will explore the major course themes through presentation of papers, possibly short practical exercises, and discussion (signup starts today; separate handout to follow). We will take turns leading the discussions each week (schedule will be agreed upon over the next two weeks). The final project will ideally contribute towards your own thesis research. It can directly stem from the discussion topics in the seminar or we can agree on other topics within the theme of spatial data analysis and remote sensing. The final projects are due April 8.

Instructional & Conduct Offences: Instructional offences include, among other activities, cheating, contravening examination regulations, plagiarism, submitting similar work in 2 or more courses without prior permission, and disrupting classes. Conduct offences apply in areas of discrimination and sexual harassment. Further information about University regulations which define and regulate these offences is presented in the 2013-14 Graduate Calendar:

<http://calendar.carleton.ca/grad/gradregulations/administrationoftheregulations/#18>

Plagiarism (the submission of someone else's writing / ideas / work as your own) will not be tolerated. All ideas presented which are not your own must be properly referenced. All presentations and your final project must be prepared independently.

Practical work:

Except for your project, if / when there are practical exercises in this course, they will be informal and based on the topics being considered in the seminar. There will not be any graded practical assignments except for the individual projects. If desired any practical work for this course can be performed in the graduate computer laboratory (Loeb A237), where PCI, Arc/INFO, ArcView, Corel Draw, R, GRASS, QGIS, Mapserver, and IDRISI are available. Other open-source solutions can also be used, through my research facilities.

It is assumed that all participants are already experienced with at least one spatial data analysis package. If you have not already completed a GIS or remote sensing course, please contact me before registering in this course.

Readings:

A reading list will be distributed for each topic. Students are encouraged to submit readings for consideration when they come across interesting candidates. Please consult with Scott for suggestions on topics you are interested in for further study, or that want to refresh yourself on to better participate in the seminars.

Academic Accommodation:

You may need special arrangements to meet your academic obligations during the term because of disability, pregnancy or religious obligations. Please review the course outline promptly and write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

Students with disabilities requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities could include but are not limited to mobility / physical impairments, specific Learning Disabilities (LD), psychiatric / psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC, 613-520-6608, every term to ensure that your Instructor receives your Letter of Accommodation, no later than two weeks before the first assignment is due or the first in-class test / midterm requiring accommodations. If you only require accommodations for your formally scheduled exam(s) in this course, please submit your request for accommodations to PMC by Nov. 8, 2013 for the Fall term and March 7, 2014 for the Winter term.

You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://carleton.ca/equity/accommodation>.