GEOG 3010  FIELD METHODS IN PHYSICAL GEOGRAPHY  WINTER TERM 2019-20

Instructor:  Dr. Murray Richardson; B355 Loeb Building  
520-2600 ex. 2574; Murray.Richardson@carleton.ca

Office Hours:  By drop-in or appointment

Classes:  Tue 08:35 am - 11:25 am Location Loeb Building Room A211

Field course:  Sunday 16 February ~11 am – Friday 21 February ~4 pm. This is the Winter Break period and includes Family Day. Field activities will take place on all days. Location: Forêt Montmorency, Quebec  
https://www.foretmontmorency.ca/en/

Calendar description:

Field and laboratory approaches, methodologies and techniques in physical geography. Field projects will be undertaken to collect data for analysis, evaluation and presentation. A supplementary charge may apply.  
Prerequisite(s): GEOG 2013 or GEOG 2014.

Textbooks:

There is no assigned textbook for the course. Students will have assigned readings in the form of journal articles and reports and will be expected to consult other relevant resources to assist with calculations and statistical analysis of field data and associated reporting. Supplementary reading will be made available where appropriate, especially in January.

Objectives:

The primary objective is to train students in data collection and analysis under field conditions. A secondary objective is to provide training in reporting of field assignments, both orally and in writing. Since the field component of this course takes place in February, there will be a major emphasis on winter research activities, especially snow hydrology and physics. Students will also make use of GIS and spatial statistics for analysis and display of data collected in the field so introductory geomatics (GEOM1004 or 2007) and statistics (GEOG2006) courses are recommended, but not required.

Course topics:

- Field measurement
- Spatial and temporal variability of field data
- Hypotheses and hypothesis testing
- Field experiments
- Precision and accuracy
- Operation, care, and maintenance of field equipment
- Field notes
- Oral and written presentations of field studies
Program: Lectures and Workshops as per schedule
Individual field exercises
Group oral presentations
Group field project report
Final examination

Evaluation:
- Pre-trip readings/preparation quiz (individual) 5%
- Field exercises (in pairs or individual) 30%
- Literature Review (individual) 15%
- Oral presentations including weather briefing (group) 15%
- Student Participation, field notes and group effort (individual) 10%
- Final Group Project (group) 25%
- 100%

Course arrangements

The course will meet weekly in the first half of term for instruction and arrangement of logistical aspects leading up to a 4-day field course held during the Winter Break. The field course will involve work outside for several hours at a time under winter conditions and include travel by foot over rough terrain. The course will be a residential experience, away from Ottawa. It will not be possible to commute to the course on a daily basis. Each student will be required to pay a supplementary fee of $285 to cover the costs of board and lodging. Transportation to and from Forêt Montmorency will be provided.

The field course will consist of daily weather briefings to be prepared by student groups; field exercises to be completed each day; and a project to be developed and conducted in small groups. After the course, students will concentrate on completing their field reports. Oral presentations of group projects will be made two weeks before the due date for the projects.

Assignments

1. Written field reports on daily field exercises must be submitted by 10:30 pm on nights 3-5 of the field course. The reports may be submitted electronically and will present field data collected during the day and statistical analyses conducted to test specific hypotheses.

2. A weather briefing will be prepared for each day of the field course. The briefing will present analysis of the synoptic conditions in south central Quebec and the weather forecast for the next 24 hours. The briefing will be presented before field work for the day begins.

3. Projects will be developed in small groups, with proposals presented to the class before the field course. The scope of the projects will be for field work that can be completed in one day. Data collection for the projects will be on the third or fourth day of the field course. Oral presentations of the projects will be made two weeks before the due date for the written reports. The reports will contain text, figures, tables, and references.

4. Literature Review: A literature review on a topic similar to the group project will be conducted on an individual basis and submitted two weeks following the field course, prior to the project deadline. Preparations towards the literature review will be expected prior to the field course in the form of an annotated bibliography.
Plagiarism

The University Senate defines plagiarism as “presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.” This can include:

- reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings;
- failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs."

Plagiarism is a serious offence that cannot be resolved directly with the course’s instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

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 forward any requests for academic accommodation to the Instructors during the first two weeks of class, or as soon as possible after the need for accommodation arises. 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 March 7, 2014. 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.
**Timetable:** we shall adhere to this schedule as much as possible.

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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>J07</td>
<td>Introduction to the course; Logistical arrangements</td>
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<tr>
<td>Week 2</td>
<td>J14</td>
<td>No meeting</td>
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<tr>
<td>Week 3</td>
<td>J20</td>
<td>Theory exercises</td>
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<tr>
<td>Week 4</td>
<td>J21</td>
<td>No meeting</td>
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<tr>
<td>Week 5</td>
<td>J28</td>
<td>Theory exercises and presentation of project proposals</td>
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<td>Week 6</td>
<td>F04</td>
<td>Theory exercise and preparation/testing of field equipment</td>
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<td>Week 6</td>
<td>F11</td>
<td>In-class quiz on pre-trip readings/preparation</td>
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<td>Week 8</td>
<td>F16-21</td>
<td>Field course</td>
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<td>Week 8</td>
<td>F25</td>
<td>Debrief, discussion of project reports, field notes cleanup</td>
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<td>Week 9</td>
<td>M03</td>
<td>No meeting</td>
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<td>Week 10</td>
<td>M10</td>
<td>Check-in to discuss oral presentations and written reports</td>
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<td>Week 11</td>
<td>M17</td>
<td>No meeting</td>
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<td>Week 12</td>
<td>M24</td>
<td>Student project oral presentations</td>
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<td>Week 13</td>
<td>M31</td>
<td>No meeting</td>
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<tr>
<td>Week 14</td>
<td>A07</td>
<td>No meeting – final group project reports due at 3 pm via cuLearn upload.</td>
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