

GEOG 3010 FIELD METHODS IN PHYSICAL GEOGRAPHY WINTER TERM 2023-24

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Office Hours: By drop-in or appointment

Classes: Approximately weekly workshops and planning meetings before the field camp week. Approximately every other week after field camp week.

Field course: Tue 20th February ~10 am to Sunday 25 February ~5 pm. This is the Winter Break period. 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 and literature review
 Group oral presentations
 Group field project report

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

COURSE ARRANGEMENTS

The course will meet approximately weekly in the first half of term for instruction and arrangement of logistical aspects leading up to a 4-day (plus travel days) 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 TBD 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.

The student participation grade will be assessed by the instructor and graduate student field assistants. The mark will reflect attitude and effort prior to, during, and after the field course at Forêt Montmorency. Attendance at all scheduled meetings is mandatory and absences will be noted part of the participation grade assessment. Participation in class discussions is also expected as part of the participation grade (responding to questions participating in class discussions, asking questions).

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.

ACADEMIC ACCOMMODATION

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Academic consideration for medical or other extenuating circumstances: Students must contact the instructor(s) as soon as possible, and normally no later than 24 hours after the submission deadline for course deliverables. Students should also consult the [Course Outline Information on Academic Accommodations](#) for more information. Detailed information about the procedure for requesting academic consideration can be found [here](#).

STUDENT CONDUCT

The University has adopted a policy to deal with allegations of academic misconduct. This policy is expressed in the document Carleton University Academic Integrity Policy, effective July 1, 2006. The policy describes in detail its scope of application, principles, definitions, rights and responsibilities, academic integrity standards, procedures, sanctions, transcript notations, appeal process, and records implications.

The complete policy is available at: <http://www.carleton.ca/studentaffairs/student-rights-and-responsibilities/>

ACADEMIC INTEGRITY

Carleton University has clear and firm policies regarding instructional and conduct offences. Instructional offences include among other activities cheating, contravening examination regulations, plagiarism, and disrupting classes. Conduct offences apply in areas of discrimination and sexual harassment. Further information about the University's Academic Integrity Policy can be found at:

<https://carleton.ca/secretariat/wp-content/uploads/Academic-Integrity-Policy-2021.pdf>

Plagiarism is one kind of instructional offence. Examples of plagiarism 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;
- the unauthorized use of generative AI tools (e.g., ChatGPT);

Plagiarism is a serious offence which 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.

For more information on how to cite sources, refer to the library web page "*Citing Your Sources*", available at <http://www.library.carleton.ca/help/citing-your-sources>.

STATEMENT ON STUDENT MENTAL HEALTH

As a university student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you:

Emergency Resources (on and off campus): <https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/>

Carleton Resources:

- Mental Health and Wellbeing: <https://carleton.ca/wellness/>
- Health & Counselling Services: <https://carleton.ca/health/>
- Paul Menton Centre: <https://carleton.ca/pmc/>
- Academic Advising Centre (AAC): <https://carleton.ca/academicadvising/>
- Centre for Student Academic Support (CSAS): <https://carleton.ca/csas/>
- Equity & Inclusivity Communities: <https://carleton.ca/equity/>

Off Campus Resources:

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550 <https://www.dcottawa.on.ca/>
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, <http://www.crisisline.ca/>
- Empower Me: 1-844-741-6389, <https://students.carleton.ca/services/empower-me-counselling-services/>
- Good2Talk: 1-866-925-5454, <https://good2talk.ca/>
- The Walk-In Counselling Clinic: <https://walkincounselling.com>

Other Campus Resources for Students:

Student Experience Office <http://www.carleton.ca/seo/>
 Health and Counselling Services <http://www.carleton.ca/health>
 International Student Services Office <http://www.carleton.ca/isso>
 Academic Advising <https://carleton.ca/academicadvising/>
 Career Services <https://carleton.ca/career/>

Sample Timetable:

Week 1	J08	Introduction to the course; Logistical arrangements
Week 2	J15	No meeting
Week 3	J22	No meeting (group project "proposals" due by Friday Jan 25th 5pm)
Week 4	J29	Readings seminar and theory exercises; Group work
Week 5	F05	Readings seminar; in-class quiz on readings
Week 6	F12	Presentation of project proposals and final preparations including field equipment testing
Week 7	F20-25	Field course
Week 8	F26	Debrief, discussion of project reports, field notes cleanup
Week 9	M04	No meeting
Week 10	M11	Check-in to discuss oral presentations and written reports
Week 11	M18	No meeting
Week 12	M25	No meeting
Week 13	A1	Student project oral presentations
Week 14	A08	No meeting – final group project reports due at 3 pm via Brightspace upload