COURSE OUTLINE
GEOG 495 – FIELD STUDIES PHYSICAL GEOGRAPHY
May 20 - May 31, 2024

INSTRUCTOR:
Prof. Christian von Sperber, chris.vonsperber@mcgill.ca

TEACHING ASSISTANT:
tba

COURSE DESCRIPTION:
Field investigations remain the primary source of data for research in Physical Geography and Environmental Science. The quality or value of a scientist's research often reflects their ability to observe and measure natural processes or phenomena in the field. Thus, exposure to field techniques and the systematic analysis of a field problem and data are important components of a student's training. This course provides an introduction to the physical environment with emphasis on the application of field methods in physical geography. The course consists of 8-9 days field instruction and independent study at the Gault Nature Reserve on Mont Saint-Hilaire. You will be required to submit 5 structured assignments and to prepare a powerpoint presentation on an independent research project, that you develop in a group of 2-3 students with my help.

PROGRAM IN THE FIELD: May 16-24
We will have a brief meeting at McGill on Monday May 13 on Zoom (time and link tba) where you will receive a detailed itinerary and have the opportunity to ask questions. On Monday, May 20, we will head to Mont Saint-Hilaire at 07:30am in the morning. We will stay overnight at Gault Nature Reserve Center from Monday, May 20, to Monday, May 27. Meals will be provided. Each morning after breakfast, we will have an introductory lecture after which we will go into the field to do a series of structured exercises & field demonstrations. Wireless internet is available at Gault so you may wish to bring your own notebook computers for background investigation on potential project topics.

Exercise Topics:
Exercise 1: Geomorphology
Exercise 2: Hydrology
Exercise 3: Biogeography
Exercise 4: Soil profile description
Exercise 5: Laboratory techniques

Independent Study: The last part of the field program will be spent on a project of your own design which will be approved by me. This project should be simple enough that you can collect your field data within 3 days and not require overly sophisticated hardware or depend on the cooperation of the weather. You do not have to have your project defined before the start of the course, although some thought and a few ideas beforehand will help you enormously.

We will return to Montreal on Monday, May 27, and you will have from May 28 to May 30 to complete the assignments and your independent research projects. On Friday, May 31 we will have a professional style conference during which you will present your independent research project in a powerpoint presentation.

INDIVIDUAL RESEARCH PROJECT:
The purpose of the individual project is to give you experience in defining, designing, carrying out a small field research project (the evaluation scheme is structured accordingly). You will be required to write

.

and present in a round table format a short proposal before starting your research project. In the proposal, I am looking for a number of elements (see proposal form) that are necessary for a successful study. Often complex studies are unsuccessful because too many things can go wrong, conversely simple projects based on a single problem or hypothesis are extremely successful. Follow the motto of Albert Einstein who said:

Everything should be made as simple as possible, but not simpler.

A component of your grade will be assessed on the basis of the problem statement (proposal), research design and field methods (and your ability to complete the study) data, data analysis, and presentation. A conference will be held at the end of the course where each group will present the results of their project (oral powerpoint presentation).

FIELD NOTEBOOK:
You will submit your field notebook on the day of the final presentation (May, 31). Your notebook should contain all your field observations and preliminary thoughts about your independent study and the other projects. Your notebook is a field diary, don't leave it until you return, don't borrow a colleague's notebook and copy, even if you are handling equipment while some one else is taking notes make sure each night you bring your notebook up- to-date.

EXERCISES:
During the first five days you will undertake exercises, even though the fieldwork associated with these assignments will be undertaken in groups you will write up your reports independently. Each assignment is worth 10% (totaling 50%).

COURSE EVALUATION:

Exercises:		50%
- *Geomorphology*	*10%*	
- *Biogeography*	*10%*	
- *Soil profile description*	*10%*	
- *Laboratory techniques*	*10%*	
- *Hydrology*	*10%*	
Individual Project:		40%
- *Proposal*	*10%*	
- *Presentation*	*30%*	
Field notebook:		10%
Total:		100%

CLOTHING:
Temperatures may range from ~5º C in the evenings to 25ºC on warm sunny days. However, you will also need to plan for cool wet weather so bring rain suits, warm clothing and rubber boots. Hiking or work boots are good for hiking, work in gravel pits or in the woods and rubber boots are needed for work around rivers and rainy days. On warm days shorts and T-shirts may be an option. However, mosquitoes and black flies can be a nuisance so bring your favorite insect repellent or a bug jacket.

RECOMMENDED CLOTHING LIST
- rubber boots
- work/hiking boots
- day pack
- running shoes
- rain coat/suit
- hat and gloves
- sweater
- anorak or wind breaker
- rain suit (water proof jacket at least)
- shorts, T shits …
- Camera

Miscellaneous
- pencils, rulers, protractor, camera,
- notebook computer if you wish
- topo. maps will be available in the field
- we will also provide a field notebook

.

- any personal needs, medications, sunscreen, sun glasses, if you wear glasses or contacts bring a spare.

COST:
In addition to the tuition fees for this course an additional fee will be charged directly to your student fee account to cover the costs for travel, food and accommodation.

Please Note: Policies governing academic issues which affect students can be found in the Handbook on Student Rights and Responsibilities, Charter of Students' Rights (online at http://www.mcgill.ca/files/secretariat/greenbookenglish.pdf).

Academic Integrity: "McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity/ for more information)."

"In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded."

Student Support: If you have a disability, please contact the instructor to arrange a time to discuss your situation. It would be helpful if you contact the Office for Students with Disabilities at 398-6009 (online at http:www.mcgill.ca/osd) before you do this.

Course Communication: Communication to students will often be via email on MyCourses. Students are encouraged to check MyCourses regularly for course updates. While students can set-up forwarding of MyCourses emails to personal accounts, they are strongly encouraged to forward this mail only to their official McGill email account (not hotmail or yahoo). The university and instructor cannot guarantee that course emails will be successfully forwarded to external email accounts.

Finally: Please inform the instructor in writing before starting the course of any medical conditions, allergies or food preferences that could jeopardize your health or limit your ability to work in a field setting.

.