GEOG 391
Field Research

Instructor
Ian McKenzie, Office Hours: Th 12:00-1:00; F 12:00 -1:15, EV1 222
Classes: 1:30 -2:30 F (May) and July 19, EV3 3406
Field Dates: June 2-4, Bruce Peninsula

Calendar Description

Field research course in which a specific area will be analyzed from a geographic point of view. Individual or group analysis of specific field problems
[Note: Estimated cost to student $225] [$199.12 + HST 13%, $25.88] (maximum fee, do not pay field trip fee until after the field trip)
[includes accommodation, most meals, transportation]
Prereq: Level at least 3A Honours Geography.

Overview

Students will work as members of a study group comprised of 4 to 5 people. The theme for this session of 391 will be pre-field research and field methods for a regional geographical synthesis. Each student selects the group in which they wish to participate. Each group is responsible for organizing their study, allocating tasks to particular members of the group and carrying out the actual research.

Objectives

- to design and complete a successful field research program.
- to develop skills to work cooperatively and equitably as a team in problem solving in the pre-field, field and post-field components of the research.

Text and Reading

There are no assigned texts for the course as examples of geographic field techniques and research methods are readily available to you on the web. Please review web sites for Bruce Peninsula National Park, Fathom Five National Marine Park, Tobermory, and Google map and satellite images for background information on the park. Specifically, review the northern part of the Bruce peninsula where your field work will be focused, as part of your pre-field
preparation. The structure of field research remains the same in any field project -- pre-field, field and post-field components.

A couple of classic field research references in geography include:
These and additional references materials are available from UW Libraries and online.

**Evaluation**
In order to ensure that we keep to an adequate time frame for this course, I will insist on the following requirements being met. All reports are group reports. The course grade will be based on group work.
1. Summary of fieldwork, due after your return from the field (June 16, (10 pages) (15%).
2. A report on your study topic, due on or before July 7, (50%)
3. Power point report presentation in class July 14 (10%) (only post-field class meeting- each group 20 minutes – approximately 12 to 15 slides)
4. A final, post-review revised report due on or before July 25, (20%)
5. Peer, group evaluation (5%). (3% due July 10; 2% due July 28)

**Course Structure**
FIELD RESEARCH – SCHEDULE Classes: May 5, 12, 19, 26; Field dates: Friday, June 2 to Sunday June 4, 2017. Only one formal post-field course meeting for presentations, July 14.

**June 2, Friday**
8:00 a.m. Depart from U. of Waterloo. (Vans will be located at the lay-by area of the Ring Road in front of EV2 and nearby PAS
12:00 - Bring a lunch if you wish, but we will be stopping in
12:30 p.m. Wiarton at a grocery store
3:30 - Field Training Sessions begin (Schedule and
5:30 p.m. locations will be announced).
6:30 p.m. Dinner
7:45 p.m. Information and Group meetings

**June 3, Saturday**
7:30 a.m. Breakfast
8:45 a.m. Group strategy meetings, field reconnaissance
6:30 p.m. Dinner, followed by group meetings.

**June 4, Sunday**
7:30 a.m. Breakfast
8:45 a.m. Group Field Work
5:00 p.m. Depart for Waterloo (arrive approx. 9:30 p.m.)
GENERAL INFORMATION

Location: Bruce Peninsula National Park, Municipality of North Bruce

Accommodation:
Tobermory Resort Inn, 122 Bay Street, Tobermory 519-596-2224
The lodge will supply all bedding and food requirements, except for lunches, which will be arranged. One member from each group will be taken into Tobermory each day, for supplies.

Equipment:
Normal Field Course Clothing - heavy footwear, sweater, jacket, etc. Bring clothing suitable for hiking through the bush, it can be wet! You will find a backpack quite helpful. (NOTE: the weather can be variable at this time of year so it is a good idea to be prepared for hot, cold and/or rainy days. Notebooks, pens and pencils will be needed. It is particularly important that you have a notebook that is appropriate for taking field notes.

Travel:
Transportation to and from Tobermory will be by van.

Purpose:
The focus of this year's field course will be on field survey techniques for environmental inventory and presentation. An initial period is devoted to instruction in data collection techniques and the use of various types of equipment and instruments. It will be important that you optimize field-study time in order to complete your assigned project.

Organization:
The course field component is for group projects in and around the north Bruce Peninsula. Each group will be assigned a specific study area and will be expected to organize and carry out a detailed field inventory of that area. Staff at the Field Course will act jointly as resource persons to all groups. In terms of a final product, each group's findings are to be compiled into a group report. This report will be shared with Parks Canada.

Pre-Course:
The materials are intended to generally orient you to this year's course in the Bruce Peninsula. Check out some web sources for the Bruce and the National Park. Additional resource materials (Maps, equipment, etc.) will be available at Tobermory.

Post-Course:
There will be only one scheduled post-field class meeting as indicated for group presentations. Contact Ian McKenzie by email or during office hours for post-field questions.
FIELD REPORT ASSIGNMENT

General Outline:

For the field course, all students will work as members of a field group. It is anticipated that each group will comprise approximately 4-5 students. Each group will be assigned to a field area unit in such a way that we will be able to sample "typical" areas of the north Bruce Peninsula. The theme for field research is field methods and inventory. Essentially, every group will be required to compile the data necessary to provide detailed inventory or field reports on its area. The information may form the basis for management planning or interpretive programs. Staff will be present as resource persons and will provide consultation, advice, direction and so on. However, each individual group is responsible for organizing its study, allocating tasks to particular members of the group, and carrying out the actual field research.

Study Area and Themes

Each field team will be allocated a defined study area. Your function in a role as ‘consultants’ is to incorporate a Geographic synthesis of the study area (geology and geomorphology, microclimatological, ecology, terrain and drainage characteristics, potential future uses and management). In co-operation with Parks Canada, we will be looking at the land based portion of Fathom Five National Park and Bruce Peninsula National Park. In consultation with Park staff I develop theme topics for each group. In your role as the consultant you will investigate and report on your study question. Topics vary, but past examples include field guides for trails or interpretive programs, trail design, impacts of trail use and information available along the trail for interpretive purposes. Another theme area is biophysical inventory and recommendations for restoration, protection and management. Also, studies in tourism, park management, transportation and the town of Tobermory and the National Parks. Studies in the shore zone can examine the sensitivity of shorelines to development, climate change and management strategies related to the shore zone.

To accomplish your task, you need to be prepared to use several pieces of equipment and techniques as they pertain to your study, (GPS, GIS, compass, microclimate instrumentation, sampling gradient, soil survey techniques, etc.).

Report:

The written assignment is a comprehensive report based on detailed field observation. The exercise involves both comprehensive observation and recording, and integration and interpretation. We expect detailed information on the landscape configuration of the selected sites, e.g. hydrology, geomorphological features, soils, vegetation, climate, land use, human impact, traffic patterns, etc. Maps, diagrams, photos, charts, graphs, etc. should be used extensively to portray the collected information. However, we do not want simply a compendium of detailed descriptive materials with little or no interpretation. A good report must systematically inter-relate various findings and provide an integrated interpretation of field observations. Overall, what we expect is a professional inventory of a standard that could be used to advise a client on the location on new facilities and interpretive trails or improve visitor experience or services.

The field report will be due in two stages. In early July, your group will submit the report. It will be reviewed by the readers and evaluated out of 50%. The report will be returned for corrections and suggestions on improvement (if required!) and the final report will be resubmitted on the last day of class for the term and marked out of 20%. There will be one report per group. Two paper copies and one digital copy will be handed in. The final reports will be held for future reference and a copy will be sent to the National Park Office reference library in Tobermory for future use. Bruce Peninsula National Park staff reported to us that they have used and welcome the information presented to them as part of our
research exercises in past years in the park. These reports will have your name on it, so I am sure you will want to do a professional project. Illustrative materials must be professional. You should include a Table of Contents, List of Figures, Maps and Tables. An appropriate length would be preferably 25-30 pages of text, depending on the report format. Most important, this is to be a group report, not a series of individual contributions. In other words, co-ordination and co-operation are critical! Team research is often difficult to do, but important for solving many geographical problems. It is important that each of you accept the responsibility of working co-operatively in this team research exercise. The grade for the group report will form the basis of the final grade (50 + 20 percent). The remaining grade will be for your post field report (15%), group presentation in class (10%) and your evaluation of the contribution of each group member, including yourself, to the report and field project (5%).

Please note that it is the responsibility of each student to be aware of what constitutes responsible behaviour in a class, lab or the field and what constitutes plagiarism, and your rights and responsibilities with respect to these issues. The University of Waterloo has policies on these issues which are outlined in the calendar and available on the university web site.

♦ **Unclaimed assignments:** Unclaimed assignments will be retained for a period of four months after term grades become official on quest. After that time, they will be destroyed in compliance with UW’s confidential shredding procedures.

♦ **Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [www.uwaterloo.ca/academicintegrity/](http://www.uwaterloo.ca/academicintegrity/)

♦ Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at [http://www.lib.uwaterloo.ca/ait/](http://www.lib.uwaterloo.ca/ait/)

♦ **Research Ethics:** Please also note that the University of Waterloo requires all research conducted by its students, staff, and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office’s Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process, etc.). If the development of your research proposal consists of research that involves humans as participants, the please contact the course instructor for guidance and see [https://uwaterloo.ca/research/office-research-ethics](https://uwaterloo.ca/research/office-research-ethics)

♦ **Note for students with disabilities:** The AccessAbility Office located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AccessAbility Office at the beginning of each academic term.

♦ **Mental Health:** The University of Waterloo, the Faculty of Environment and our Departments consider students’ well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or
emotional. Please note that help is available. Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services http://www.uwaterloo.ca/counselling-services is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

♦ Religious Observances: Student needs to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

♦ Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details.

♦ Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

♦ LEARN: Users can login to LEARN via: http://learn.uwaterloo.ca/ use your WatIAM/Quest username and password