

Department of Geography  
University of Toronto

**COURSE OUTLINE**  
**GGR 390H1F- Field Methods in Physical Geography**

**2017-2018**

**INSTRUCTORS**

Joe Desloges	ES2124	<a href="mailto:joseph.desloges@utoronto.ca">joseph.desloges@utoronto.ca</a>	416-978-5784
Jing Chen	SS5048	<a href="mailto:chenj@geog.utoronto.ca">chenj@geog.utoronto.ca</a>	416-978-7085
Anna Marie Soleski	ES3095	<a href="mailto:anna.megens@mail.utoronto.ca">anna.megens@mail.utoronto.ca</a>	
Pamela Tetford	ES3095	<a href="mailto:pam.tetford@mail.utoronto.ca">pam.tetford@mail.utoronto.ca</a>	

**COURSE DESCRIPTION**

GGR390 consists of an introduction to basic field methods in several areas of physical geography including: climatology, hydrology, biogeography, soils and geomorphology. The field component of the course occurs in late August prior to the start of term. The course content is directed towards research design, data collection and analysis in the context of a group research project. The data collected during the field camp will be analyzed during the fall term. We have scheduled three formal meetings during the fall term at times we hope are convenient for everyone as attendance is required. There are no other regularly scheduled meetings during term time, however we expect that you will be meeting with your group members on a weekly basis to conduct your research and write-up.

LOCATION/DATES

UofT Koffler Scientific Reserve, King Township, Ontario. **Departing Monday August 28 at 08:00** (arrive no later than 07:45 am at 22 Russell St.) **returning Friday Sept. 1** at around 16:30 (depending on traffic).

**MARKING SCHEME AND REQUIREMENTS**

The grade for the course will be based on:

Weighting

(a) Assignment 1 (individual assignment):

Analysis of climate data

15 %

**DUE Tue. Sept. 12<sup>th</sup>, 2017**

(b) Assignment 2 (individual assignment):

Analysis of hydrology and water quality data

15 %

**DUE Tue. Sept. 26<sup>th</sup>, 2017**

(c) Research project outline and literature review

---

Outline **DUE Tuesday October 3, 2017**

Literature Review: **DUE Tuesday October 10, 2017**

These are group assignments

(d) Project – group presentation and final group report	
Oral Presentation <b>Thursday November 2<sup>nd</sup>, 2017, 3-6 pm</b>	10%
Final paper <b>DUE Thursday November 16<sup>th</sup>, 2016</b>	60%

- A late penalty of 5 % per day will be imposed on assignments. Don't let this happen on something worth 60% of your course grade! We will not accept any assignments handed in more than 6 days after the due date as papers will be returned one week following due dates.
- All assignments are to be submitted to the Earth Sciences main office (Rm 1066), at the Earth Sciences Department, 22 Russell St.
- No extensions will be granted unless you have an official UofT medical certificate signed by your physician.
- You will be provided with a field guide on the day of departure. The field guide provides instructions on what is expected for the project outline, literature review, project presentation and final report.

### **SCHEDULED MEETINGS**

- **Tuesday, September 19<sup>th</sup>, 2017; 4-5 pm.** Hand back first assignment and review of key findings. Tips for completion of assignment #2. Review laboratory procedures for projects with on-going lab work.
- **Tuesday October 3<sup>rd</sup>, 2017; 4-5 pm.** Review of 2<sup>nd</sup> assignment and submission of project outlines. We will also review progress on lab work, and research write-ups. Come prepared to give a brief group update (5 mins).
- You are responsible for scheduling a mid-term meeting(s) with your project supervisor for review of progress (must take place before the end of October). A work plan **signed by all group members** can be discussed at this meeting.
- **Thursday, November 2<sup>nd</sup>, 2017; 3-6 pm.** Group Presentations. Attendance is required.
- Meeting locations are TBA.

### **\*\*What is expected for the project outline (Due Oct. 3/17)**

This only needs to be ~ 2 pages in length. Please type and hand in one outline/group.

- Project title
- Group member names
- Key research questions – what are you asking and why is it important
- Brief summary of methods used (field, lab, statistical)
- A few (2-3) citations from peer-reviewed scientific journals or relevant texts

- Timeline for completion of project and **breakdown of tasks between group members**

At our class meeting on Oct 3rd at 4 PM, each group will be asked to give a ~5 minute verbal update on the project title and objectives to everyone (no power point required).

**\*\* What is expected for the literature review (Due Oct 10/17)**

- Annotated bibliography: key citations with descriptions (1 paragraph each) of how they are relevant to YOUR research questions/your project (do not summarize the articles - connect them to what you are doing).
- Discuss ~6 citations (but you can list additional key references as appropriate).
- Please type. Please hand in one per group.

You will not be given a mark for the outline nor for the literature review – your overall project grade at the end of the course will reflect your effort throughout the term.

**\*\* What is expected for the oral presentations (Nov 2/17)**

- Presentations are 13-15 minutes of talking, with Power Point or equivalent.
- Practice your talk. Make sure it is the right length. We have a tight schedule so talks cannot go over-time. You will not be given more than 15 mins. for your presentation.
- Each talk will be followed by 5-7 mins of questions from peers and professors.
- Organize your talk into these sections:
  1. Brief introduction to the research problem and key questions, and briefly, place your project into context (why it is important)
  2. Brief overview of methods, study area
  3. Summary of results (show graphs and key data slides and photos as appropriate)
  4. Discussion - interpretation of the results, return to the research questions, discuss any limitations or avenues for further research. Discuss your results in the context of the relevant literature.
- **Note that only 1/3 of your presentation should be spent on points 1 and 2. The main emphasis should be on your results and what they mean (points 3 and 4).**
- Note that your attendance is expected for everybody's talk. We will finish at 6 PM. You must arrive at 3 PM as we will be doing course evaluations at that time. There will be a 20 minute break half way through the session.
- We expect good questions from the audience during the question period.
- We will give you feedback afterwards on the content, the critical thinking in your work, and the presentation style.
- We will forward to you beforehand a schedule for your talks.

**\*\* What is expected for the final project report (Due Thur. Nov. 16/17)**

- Your final reports should be written in the style of a scientific paper.
- They should contain the following sections:
  - Abstract
  - Keywords (6)
  - Introduction
  - Methods
  - Results
  - Discussion and conclusions
  - References cited
- You should include tables and figures throughout to show your data and relevant results. All tables and figures that are included must be referred to and discussed in the text.
- Any data tables or figures not directly related to your main findings should be placed in an appendix
- Use a consistent citation and bibliographic style (see instructions for Assignments #1 and #2).

The project will be assessed for:

- Clarity of objectives
- Quality of processed data and its presentation
- Reference to the literature that addresses the problem and the contributions your study makes to the understanding of the research question
- Strength of the arguments and conclusions you draw from all of the above
- Quality and clarity of the presentation you make in front of your peers

For all assignments in this course, please use appropriate referencing and bibliography. We strongly encourage students to make use of the Citation Management applications, or other apps, offered by the U of T Library system. See: <http://guides.library.utoronto.ca/citationmanagement>

We will also post on Blackboard a primer titled “**Graphing/Plotting with Excel**” to assist you with preparing graphs for Assignments 1 and 2.