

COURSE ADMINISTRATIVE INFORMATION**GGR1217 Arctic Environments**

Lectures: Tuesday 12:00 - 2:00 DV 1158 B, additional discussion session 2:00 – 3:00 as needed.

Course description:

High latitude environments are becoming the focus of increasing scientific attention because of their role in global environmental change. The implications of changes occurring to the sea ice and snow cover are far reaching and can have impacts on physical, biological and human systems both within and beyond the region. This course will provide a comprehensive examination of climates of high latitudes. Topics that will be covered include the Arctic energy budget and atmospheric circulation, the hydrologic cycle in the Arctic, the ocean-sea ice-climate interactions and feedbacks, modelling the Arctic climate system as well as an evaluation of recent climate variability and trends. This course is run in parallel with GGR484.

PERSONNEL INFORMATION

Instructor: Dr. Laura Brown

Office: DV3279

Office hours: by appointment

Email: lc.brown@utoronto.ca (preferred communication method)

Phone: 905-569-4239 (emergencies only, no voice mail)

Communications:

- Always use your University of Toronto e-mail address (...@mail.utoronto.ca) for all course-related communications. Other e-mail addresses may be filtered as spam and we do not promise to respond to them.
- Please include the course code (e.g., ENV100Y5Y) as part of your subject line, and include your full name and student number in the body of the e-mail.
- Please read the course handouts and check the course Blackboard site before e-mailing a question, to make sure that it hasn't already been answered.
- The first person that you should e-mail concerning department- or program-related queries or to submit documentation regarding a missed quiz or test is the Academic Counsellor for Geography/Environment, Sabrina Ferrari (sabrina.ferrari@utoronto.ca).

COURSE ACADEMIC CONTENT INFORMATION**Course Text:**

There is no required text for this course. Required readings will be assigned for lectures and provided on Blackboard. Recommended further reading: Serreze, M.C. and R.G. Barry (2014). The Arctic Climate System 2nd edition. Cambridge University Press, United Kingdom 385 pp. (first or second edition).

Course assignments:

There will be three take-home assignments during the term, assigned in class, each worth 15%. There will be two weeks to complete each assignment, and they will be due on Oct. 19, Nov. 2, Nov. 16.

Term paper assignment:

The term paper will address an interesting aspect of the Arctic climate, as chosen by each student (must be approved by the course director). The final paper will be presented in class and submitted in written form. The final term paper report is due **DECEMBER 2, 2014**.

Examinations:

There will be no examination in this course.

Grading scheme:

Term project presentation (In Class, Nov)	15%
Term project paper (Due, Dec. 1)	35%
3 assignments (15% each) (Due Oct. 13, Oct. 27, Nov. 10)	45%
Participation	5%

Academic support available:

- 1) Contact information stated above for specific questions and concerns.
- 2) Course Blackboard site for lecture topics, review questions, articles, diagrams that are not otherwise accessible, discussion board for general questions and answers.
- 3) Your ability to write an effective term paper is a significant aspect of your grade assessment, so it is important to write well. A good way to prepare is to consult *Specific Types of Academic Writing* listed at University of Toronto [Advice on Academic Writing](#), where there is guidance on this and other aspects of academic writing.
- 4) For access to reading material try the UTM Library <http://library.utm.utoronto.ca>. Material that cannot be accessed in this way will be placed on reserve.
- 5) To address weaknesses in the skills noted in the course description above contact the Robert Gillespie Academic Skills Centre www.utm.utoronto.ca/asc.

POLICIES

Missed Term Work (Assignment/Lab – as per Department of Geography policy):

Late assignments will be subject to a late penalty of 10% per day (including weekends) of the total marks for the assignment. Assignments submitted five calendar days beyond the due date will be assigned a grade of zero.

Academic Integrity/Honesty or Academic Offenses:

It is your responsibility as a student at the University of Toronto to familiarize yourself with, and adhere to, both the Code of Student Conduct and the Code of Behaviour on Academic Matters.

This means, first and foremost, that you should read them carefully.

- The [Code of Student Conduct](#) is available from the U of T Mississauga website (Registrar > Academic Calendar > Codes and Policies) or in your print version of the Academic Calendar.
- The [Code of Behaviour on Academic Matters](#) is available from the U of T Mississauga website (Registrar > Academic Calendar > Codes and Policies) or in your print version of the Academic Calendar.

Another helpful document that you should read is [How Not to Plagiarize](#), by M. Proctor.

Accessibility:

U of T Mississauga and the AccessAbility Resource Centre are committed to the full participation of students with disabilities in all aspects of campus life. The AccessAbility Resource Centre provides academic accommodations and services to students who have a physical, sensory, or learning disability, mental health condition, acquired brain injury, or chronic health condition, be it visible or hidden. Students who have temporary disabilities (e.g., broken dominant arm) are also eligible to receive services. All interested students must have an intake interview with an advisor to discuss their individual needs.

Students who require accommodation are advised to visit the AccessAbility Resource Centre as early as possible to have their needs assessed, as it may take some time to process the application.

For more information please contact the centre at:

Room 2047, South Bldg.

Tel/TTY: 905-569-4699

E-mail: access.utm@utoronto.ca

Web: www.utm.utoronto.ca/access

Policy on Religious Observances:

As noted in the the [Policy on Scheduling of Classes and Examinations and Other Accommodations for Religious Observances](#), the following provisions are included:

“It is the policy of the University of Toronto to arrange reasonable accommodation of the needs of students who observe religious holy days other than those already accommodated by ordinary scheduling and statutory holidays.

Students have a responsibility to alert members of the teaching staff in a timely fashion to upcoming religious observances and anticipated absences. Instructors will make every reasonable effort to avoid scheduling tests, examinations or other compulsory activities at these times. If compulsory activities are unavoidable, every reasonable opportunity should be given to these students to make up work that they miss, particularly in courses involving laboratory work. When the scheduling of tests or examinations cannot be avoided, students should be informed of the procedure to be followed to arrange to write at an alternate time.

It is most important that no student be seriously disadvantaged because of her or his religious observances. However, in the scheduling of academic and other activities, it is also important to ensure that the accommodation of one group does not seriously disadvantage other groups within the University community.”

With respect to minimum advance notice, the Policy provides that "Students have a responsibility to alert members of the teaching staff in a timely fashion to upcoming religious observances and anticipated absences." Since students would normally be aware of upcoming religious observances as well as examination schedules in advance, a minimum of three weeks advance notice will be considered sufficient.

More information and some dates of potential relevance for the U of T community are available at www.viceprovoststudents.utoronto.ca/publicationsandpolicies/guidelines/religiousobservances.htm.

As with any academic accommodation request, students must submit an on-line Special Consideration Request @ <https://utmapp.utm.utoronto.ca/SpecialRequest>

Expectations/Classroom Behaviour/Behaviour in the Academic Setting:

Our expectation of you is that you will show respect to the Course Instructor, TAs, other faculty, staff, and fellow students. This includes arriving on time and staying for the entire class (so you don't disturb others by your late entry or early departure); listening quietly (so you don't disturb others by your chatting or online activities); approaching your course work with an open, honest spirit and enthusiasm; and otherwise adhering to the Code.

In turn, you can expect the Course Instructor, staff, and TAs to show respect to you and your fellow students; to deliver the best course that they possibly can; to communicate their enthusiasm for the material; to maintain fairness in all aspects of course delivery and assessment; and otherwise to adhere to the University's Code of Behaviour on Academic Matters.

How to Query or Challenge a Mark:

Please note that, according to UTM policy, you have one month from the date an item is returned to you, during which time you may query the mark or submit the item for remarking. Contact the Course Instructor for all queries about course marks, or if you wish to challenge a mark. Absolutely no item will be remarked after the one-month period has passed.

Material submitted for remarking must be accompanied by a brief written explanation detailing your reasons for dissatisfaction with the original mark (such as an addition error, or something you think the marker may have missed). The item may be returned first to the TA who originally marked it. If you are still dissatisfied, it may be passed on to the Course Instructor for reconsideration.

GGR1217: Arctic Environments
TENTATIVE COURSE SCHEDULE FALL 2016

DATE	WEEK	TOPIC	READINGS* / ASSIGNMENTS
Sept. 7	1	Course details / Introduction	Readings: TBA
Sept. 14	2	Arctic energy budget	Readings: TBA
Sept. 21	3	Atmospheric circulation	Readings: TBA
Sept. 28	4	Surface energy budget	Readings: TBA Assign. 1
Oct. 5	5	Hydrologic cycle	Readings: TBA
Oct. 12	6	READING WEEK	
Oct. 19	7	Climate regimes of the Arctic	Readings: TBA Assign. 1 due / Assign. 2
Oct. 26	8	Arctic ocean-sea ice-climate interactions (Guest Lecture)	Readings: TBA
Nov. 2	9	Modelling the Arctic system	Readings: TBA Assign. 2 due / Assign. 3
Nov. 9	10	Recent variability, trends and the future / Term paper presentations (GGR1217)	Readings: TBA
Nov. 16	11	Term paper presentations (GGR484)	Assign. 3 due
Nov. 23	12	Term paper presentations (GGR484)	
Nov. 30	13	Term paper presentations (GGR484)	