Faculty of Science

Division of Natural Science

http://natsci.info.yorku.ca/

Course Outline

NATS 1780, Section A, Weather and Climate
Fall Term 2018 & Winter Term 2019
Thursdays, 7-10 pm, LAS C

Course Instructor and Contact Information

Ian Lumb, ianlumb@yorku.ca

- Office hours (before/after lecture, or by appointment)

Email Policies and Etiquette

Moodle is the *primary* instructional platform for the course. The instructor attempts to ensure that the information provided via Moodle is comprehensive, current and useful. Therefore, prior to sending email to the instructor, ***please*** ensure you have already attempted to make use of Moodle to acquire the information you seek. If you have a question that is *not* of a private nature (e.g., regarding grades, absence), please make use of the Moodle forums, as one of your classmates or TAs may be able to provide you with an answer before the instructor can.

If you feel that email to the instructor is actually required, please:

- **Send from your @my.yorku.ca email** account (not from hotmail, gmail, etc.) – emails from non-my.yorku.ca accounts may languish in a spam folder that is checked only intermittently (if at all).
- Include your course, full name and student number in your email.
- Include “NATS 1780” in the subject line at the bare minimum.

Your attention to this process is greatly appreciated - and benefits all students.

Expanded Course Description

"Weather and Climate" is a course designed to fulfill the General Education requirement of students in the Faculty of Liberal Arts and Professional Studies as well as the Faculty of Fine Arts. As such, this course aims to acquaint students not intending to be professionally involved in science, with some of the concepts, methods and achievements of science. It is designed specifically to allow students who have little science or mathematical background to learn about the science behind weather and climate as well as to frame associated issues in appropriate contexts.

Additional description will be provided via the course's Moodle site.

Course Learning Outcomes

Upon successful completion of this course students should be able to:

- Understand weather and climate from a scientifically literate perspective - a perspective informed by the inclusion of qualitative and quantitative elements
- Demonstrate the application of various skills (e.g., problem solving, critical thinking) to the investigation of weather and climate from quantitatively oriented perspectives - perspectives that emphasize the framing of time, space, data and systems in geoscientific contexts

More-specific outcomes will be identified in weekly "Weather Reports" and lectures, then applied through the term work and exams.

Evaluation

4 assignments (5% each)	20%
6 quizzes (2% each, best 5 of 6)	10%
4 labs (2.5% each)	10%
Participation	0 or 10%
Exams (December & April, 25 or 30% each)	50 or 60%

Notes:

- Please consult http://goo.gl/YZVsK for a calendar specific to NATS 1780.
- Quizzes are typically comprised of multiple-choice questions. Quizzes will be made available via Moodle for at least one week; students will need to allocate about 60 minutes to take the quiz when it is available.
- Exams are held during December and April at the University's Keele Campus; they are scheduled by the Registrar's Office. Samples will be posted in September to illustrate the format of the exams; deferred exams may make use of a *different* format.

In order to be fair and consistent to the entire class, individual grades are ***not*** negotiable and 'extra-credit' assignments are ***not*** provided at any point during or after the course. Please contact the instructor about a grade ***only*** if there is a clear **error** (calculation, clerical, etc.) within two weeks of the grade being made available to you.

Course Materials

Meteorology Today: An Introduction to Weather, Climate, and The Environment, Second Canadian Edition, Ahrens, Jackson & Jackson, 2015 (REQUIRED)

This textbook is currently available via the York University Bookstore, and possibly in different formats (e.g., hardcover, ebook).

Readings will be assigned on a weekly basis from ***this*** edition of the textbook.

Readings for the First Canadian Edition of the textbook are likely to be made available as well.

Other versions of Ahrens' textbooks (e.g., the US editions) are not recommended, and will not be supported from a readings perspective.

Laboratory

The course includes a total of 4 labs, split evenly over the two terms.

Labs are conducted on your own time, at a convenient location - i.e., not necessarily on Campus.

The lab ‘manual’ will be provided to students at no additional cost. Some labs may require use of commonly available items - e.g., the camera on your mobile phone, rice, …

Dates relevant to labs will be made available via the course calendar alluded to previously.

Note: You are encouraged to work together on labs. However, your submission must be original. Translation: Write up your final lab submissions independently, using your own words.

Course Content and Format

Weekly “Weather Reports” will be issued via Moodle before each Thursday’s lecture; in these announcements, emphasis will be given to “Learning Outcomes” (including scheduling constraints such as due dates) and “Resources”.

Resources will include readings as well as the slides to be used during the lecture; captures of past lectures will be added within the 24-48 hours.

The majority of the lectures will be delivered in person; however, approximately once or twice per term, lectures will be delivered online - resulting in a slightly blended format. Students should assume in-person lectures unless advised otherwise by the Course Director.

Math Content

Atmospheric science is a discipline awash with data - quite literally at times! And use of this data allows the science to be quantified in various ways - e.g., through tables and charts of data, mathematical manipulations, …

Armed with approximately a math background at the Ontario Grade 10 level, students should be well placed to handle the quantitative aspects of assignments and labs during the term; quizzes will not include questions requiring math.

Finally, exams will allow students to choose between a 'math-oriented' quantitative question or an essay.

In other words, there is no requirement for students to confront the 'math oriented' aspects of the course on their own, unless they choose to.

Note: In addition to the support that will be provided through the course, there are additional resources available as detailed below - see, e.g., M-AID in NATS.

Course Policies

Questions and Concerns

Questions and concerns should be raised first with the Course Director; for cases in which the Course Director is unable to resolve matters, students will be presented with options for escalation. In some cases, Class Representatives can facilitate interactions with the Course Director - e.g., in representing the questions and/or concerns of multiple students in the course.

Use of Moodle Forums

Moodle Forums are designed to facilitate 'public discussions' on matters relating to the course. As such, you will find forums specific to labs and assignments, as well as one for discussing anything else that is relevant to the course. Students are asked to be highly considerate and respectful in every way when engaging in these discussions - in many cases, for example, this means reviewing previous posts *prior* to posting, as some points are posted repeatedly. When it comes to labs and assignments in particular, considered, respectful and specific questions are the most likely ones to receive useful answers … in other words, it is expected that you will expend some

effort *prior* to posting any questions. Private and confidential matters (e.g., regarding grades, accommodations, illness, …) need to be handled via email or in person.

Late Submissions and Late Penalties

Late submissions are typically accepted until solutions have been posted; however, late penalties will be applied. Late penalties will be specified on a per-lab or per-assignment basis.

Reappraisal Requests

Students' work is assessed by graduate students familiar with weather and climate, and subject to a marking rubric provided by the instructor. Since students are also provided with the rubric, any requests for reappraisal ***must*** provide a detailed rationale for the request by making specific reference to the rubric; non-specific requests (e.g., "I feel I deserve a better mark.") cannot be responded to.

Exams and Quizzes

Attendance at exams is mandatory. An exam missed as a consequence of medical circumstances must be supported by an Attending Physician's Statement, which can be downloaded from: http://www.registrar.yorku.ca/pdf/petition_package.pdf, or a statement by a psychologist or counselor. Students are NOT expected to disclose the nature of the illness. The document must specify:

1. Date of consultation.
2. Contact information (e.g. phone number of the hospital; legible name of the health provider) that would allow verification of the document.
3. A statement that the student would not have been able to attend class (or carry out activities) during the relevant period of time.
4. The document must be signed by the attending physician.

The documentation must be dated on the same day as the exam or earlier, or it will not be accepted. The Course Director must be notified by email within **24** hours in the case of a missed exam. Appropriate documentation must be submitted to the Course Director within one week after the test or exam.

Opportunities to make up missed quizzes will not be offered. However, the percentage value of the missed quiz will be added to the final exam.

Copyright and Intellectual Property

Students should familiarize themselves with the terms "copyright" and "intellectual property". Once understood, students will also understand that inappropriately sharing copyrighted content, or any content for which they do not own the intellectual-property rights, can result in legal and/or academic consequences.

For example, posting solutions of this course's labs, assignments, quizzes and/or exams on a third-party site that charges others for access and/or use, constitutes a very serious violation. Increasingly, publishers, universities, and individual professors, are confronting violators with legal and/or academic action.

It must also be understood that misrepresenting someone else's work as your own, might also warrant serious legal and/or academic action.

University Policies

Important Sessional Dates

Includes sessional start and end dates, drop deadlines, and withdrawal dates.

See the Office of the Registrar website at http://www.registrar.yorku.ca/enrol/dates/

Academic Honesty and Integrity

Academic honesty requires that persons do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such works as their own or through impersonation. Similarly, academic honesty requires that persons do not cheat (attempt to gain an improper advantage in an academic evaluation), nor attempt or actually alter, suppress, falsify or fabricate any research data or results, official academic record, application or document. Finally, academic honesty requires that persons do not aid or abet others to commit an offence of academic dishonesty, including intentional acts to disrupt academic activities.

Suspected breaches of academic honesty will be investigated and charges shall be laid if reasonable and probable grounds exist.

Academic Honesty and electronic devices during assessments (*e.g.* exams)

- Internet capable and personal storage devices of all kinds must be turned off, including vibrate. These and any other unauthorized material must be placed under the student's chair and should not be accessed at any point during the exam. Failure to comply with directive may be considered a break of academic honesty.
- See http://registrar.yorku.ca/exams/tipsheet

Please familiarize yourself with the full Senate Policy on Academic Honesty, found at http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/

Please also familiarize yourself with the SPARK Academic Honesty tutorial found at https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/

Academic Accommodation for Students with Disabilities

York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses.

Please familiarize yourself with the full Senate Policy on Academic Accommodations for Students with Disabilities, found at http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/

Note: Students should submit accommodation letters from Counseling and Disability Services (CDS) to the course instructor within the first two weeks of the course or as soon as issued.

Counseling and Disability Services - http://cds.info.yorku.ca/

York Accessibility Hub - http://accessibilityhub.info.yorku.ca/

Note: A student registered with CDS, and choosing to write with Alternate Exams, is responsible for making the appropriate writing arrangements within the timeframes outlined by Alternate Exams.

Alternate Exams - http://altexams.students.yorku.ca/

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents.

https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/15/wo/kmHGekTpzKLX6XYKBXYc8M/0.3.4.62.0

Note: Students who will have an academic conflict as a result of a religious observance, at any point in the term, should make the instructor aware of such at least three weeks prior to the conflict.

For conflicts occurring during an official examination period, please complete the Examination Accommodation Form available at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf and submit to your instructor at least three weeks prior to the final exam.

Student Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures regarding disruptive and/or harassing behaviour by students in academic situations is available on the website of the University Secretariat (http://secretariat.info.yorku.ca/).

Disruptive Behaviour - Senate Policy

Extract from the Policy: “no individual or group of individuals shall cause by action, threat or otherwise, a disturbance that obstructs any academic activity organized by the university or its units.”

The Policy includes a procedure for addressing disruptive behaviour that can have academic implications.

Weather Emergencies

Please refer to the University's Policy (http://secretariat-policies.info.yorku.ca/policies/weather-emergencies-policy/) and Procedures (http://secretariat-policies.info.yorku.ca/policies/weather-emergencies-procedures/).

Division of Natural Science Resources

NATS-AID
Free peer tutoring for students enrolled in Natural Science Courses.
See http://natsci.info.yorku.ca/nats-aid/

M-AID in NATS (Math Aid)
Free math help for students enrolled in Natural Science Courses (TA tutors)
See http://natsci.info.yorku.ca/m-aid-in-nats/

Other Resources

Learning Commons
The Learning Commons brings together key supports for your learning: writing, research, learning skills and career services. http://www.library.yorku.ca/cms/learning-commons/

goSAFE
goSAFE is a complimentary service provided to the York Community. At the Keele campus, goSAFE has two routes: North Route & South Route which will safely transport community members by vehicle from one specified hub to another on campus. goSAFE operates seven days a week, all year round, including University closures (with the exception at Glendon during the Christmas holiday closure).

Call the goSAFE office at 416-736-5454 or extension 55454 during hours of operation. Please give your name, location and destination. http://www.yorku.ca/goSAFE/

Mental Health and Wellness at York University
Outlines a variety of resources available to support mental health and wellness
http://mhw.info.yorku.ca/resources/resources-at-york/students/

Good2Talk
Post-Secondary Student 24 hour Helpline
http://www.good2talk.ca/ 1-866-925-5454