PMU199H1S – Climate Change: Software, Science and Society

Winter 2012

http://www.cs.toronto.edu/~sme/PMU199-climate-computing

General Information

Instructor:

Prof Steve Easterbrook, Bahen Center BA3259 e-mail: sme@cs.toronto.edu

TA: Alicia Grubb; email: amgrubb@cs.toronto.edu

Seminars: Tuesdays 2pm-4pm, BA 2159 Tutorials: Thursdays, 2pm-3pm BA 2159 Instructor's office hours: Tuesdays & Thursdays at 4pm in BA3259; other times by appointment

Recommended Texts

There is no required text for the course. Some useful background guides to the science of climate change include:

- Ian Allison et al. *The Copenhagen Diagnosis*. Elsevier. Available free online at <u>http://www.copenhagendiagnosis.com/</u>
- David Archer and Stefan Rahmstorf, *The Climate Crisis: An Introductory Guide to Climate Change*, Cambridge University Press

John Houghton, *Global Warming: The Complete Briefing*, Cambridge University Press or, if you want something a bit cheaper, *The Rough Guide Climate Change*

The IPCC Fourth Assessment Report is online at http://www.ipcc.ch/ipccreports/ar4-wg1.htm

When searching for information on climate change on the web, be careful, as there is a lot of disinformation out there. We'll discuss why during the course, and talk about how to assess the reliability of what you find. The various pages on wikipedia relating to climate change are pretty good. I'll post many other readings and pointers to websites as the course progresses.

Course Prerequisites

There are no prerequisites. It should not matter if you have no previous experience of programming (we won't be doing any programming on the course), nor of advanced mathematics or physics. However, I will rely on you all to let me know if you need me to fill you in on more of the basic ideas for any of the topics we cover.

Attendance at Seminars and Tutorials

We'll use the Tuesday 2-hour seminar slot to introduce a new topic each week, and the Thursday 1-hour tutorial slot as a chance to ask follow-up questions, identify gaps in your understanding, and to identify interesting links between the course and other things you're interested in. The Thursday slot is also a chance to talk about the assignments and practice your communication skills. Attendance at Seminars and Tutorials is mandatory. A central component of this course focuses on communication skills. If you're not there to participate in the discussions, you can't practice these skills!

Communication & Email Policy

Please use seminars and tutorials as your main opportunity to ask questions about the course. Major announcements will also be posted on the course website.

NOTE: I typically receive hundreds of emails a day. I tend to read them quickly, but am much slower to respond (more than a week late is possible). Hence, I will **not** normally respond to email questions, unless it is an emergency. If you send me questions by email between seminars, I will provide answers or clarifications in the seminars, rather than by responding by email. *Bear in mind that mail to me passes through a spam filter, and email sent to me from non-UofT addresses might not reach me. If you send me email, and I don't address your questions in the next seminar, please ask about it - I may have forgotten, or I may have not received the email.*

Assessment

There are four practical assignments, as follows:

Task	%	Details	Drafts Due
Assignment1	15%	Research a topic related to the course and write a short blog post about it	January 27
Assignment2	20%	Prepare and present a 10-minute powerpoint presentation (in teams of 2)	February 17
Assignment3	15%	Design an experiment (in teams of 4)	March 16
Assignment4	40%	Final writing assignment	April 5

And additional 10% of the grade is for course participation. Half of this (i.e. 5%) is for participating in seminars and tutorials, and the other half (i.e. 5%) is for participating in the course blog.

For all the assignments, you will be asked to submit a draft by the due date. We'll then give you back comments, so that you can revise it for a final version. Due dates for the assignments are firm. Assignments must be submitted electronically, by email, by midday (12pm) on the due date.

Please note that the TA and the instructor will not answer any questions relating to assignments within the 24-hour period prior to the deadline. If you have questions about the grade your assignment received, please ask your TA. **However, all requests for remarking must be made to Prof Easterbrook**.

Teamworking

Some assignments will be done in teams. If you encounter any problems working with your teammates, please let me know as early as possible. Failure to submit the assignment because of an inability to get it together with your team will not be accepted as an excuse!

Warnings

- Avoid plagiarism. Do not copy text from websites or from other students. If you get together with others to discuss an assignment, try to keep the discussions general, and don't take notes. That way you will be more likely to focus on your own ideas when your write it up. See the course website for advice on plagiarism and teamworking.
- Extensions to assignment deadlines will only be granted in the case of documented medical emergencies. See http://www.utoronto.ca/health/forms/forms.htm