PSYC58: Psychology and Climate Change

University of Toronto Scarborough Winter Term. 2023

Introduction

Instructor: Prof. George S. Cree Email: george.cree@utoronto.ca

Office: SW405

Office Hours: Thursdays 1-3

About Your Instructor

Prof. Cree is a faculty member in the Department of Psychology at UTSC. He joined the department in 2003. His main current research interest is neural network modeling of impression formation (i.e., building computer models that help us understand the knowledge activated within the first few hundred milliseconds of encountering a person, including why and how this knowledge may sometimes reveal implicit biases). He also has teaching interests in the psychology of climate change and practical, lab-based research methods.

Course Description

This course will introduce students to a variety of topics in psychology as they relate to climate change. Topics covered will include the threats of a changing environment to mental health and wellbeing; the development of coping mechanisms and resilience for individuals and communities affected negatively by climate change; perceptions of risk, and how beliefs and attitudes are developed, maintained, and updated; effective principles for communicating about climate change; how social identity affects experiences and perceptions of climate change; empirically validated methods for promoting pro-environmental behaviour; and how, when required, we can best motivate people to action. Special focus will be placed on the cognitive mechanisms underlying risk perception, beliefs, and attitudes, and the roles they play in shaping behaviour.

Prerequisites: [(PSYB01H3) or (PSYB04H3) or PSYB70H3] and [PSYB07H3 or STAB22H3 or STAB23H3] and [0.5 credit at the B-level in PSY courses]

High-Level Learning Outcomes:

After successful completion of this course, you will be able to:

- recall and explain the ways in which psychology can play an important role in addressing climate change
- critically evaluate the literature on psychology and climate change, in terms of being able to
 evaluate the weight that should be placed on different types of evidence and claims, based
 on methods used and strength of arguments
- communicate effectively in written form about the issues discussed in the course at a level appropriate for scientific discourse aimed at the general population and other psychologists

Course Content

Lecture Schedule & Readings

The course is designed around 24 lectures, covering 24 topics. We will cover 2 lecture topics each class/week. The schedule, topics, and readings for each week are listed below. Please review the readings before coming to class each week.

Week 1 (Jan 12, 2023, 11-1, SY 110)

L01: Introduction

Canadian Psychological Association (2021). Addressing climate change in Canada: The importance of psychological science. *Psynopsis*, *43*(2), 6-8.

L02: Mental Health & Well-being

Palinkas, L. A., & Wong, M. (2020). Global climate change and mental health. *Current Opinion in Psychology*, 32, 12–16. https://doi.org/10.1016/j.copsyc.2019.06.023

Week 2 (Jan 19, 2023, 11-1, SY 110)

L03: Development

Hahn, E. R. (2021). The developmental roots of environmental stewardship: Childhood and the climate change crisis. *Current Opinion in Psychology*, *42*, 19–24. https://doi.org/10.1016/j.copsyc.2021.01.006

L04: Cognition

Luo, Y., & Zhao, J. (2021). Attentional and perceptual biases of climate change. *Current Opinion in Behavioral Sciences*, 42, 22–26. https://doi.org/10.1016/j.cobeha.2021.02.010

Week 3 (Jan 26, 2023, 11-1, SY 110)

L05: Neuroscience

Wang, S., & van den Berg, B. (2021). Neuroscience and climate change: How brain recordings can help us understand human responses to climate change. *Current Opinion in Psychology*, 42, 126–132. https://doi.org/10.1016/j.copsyc.2021.06.023

L06: Environmental Neuroeconomics

Sawe, N., & Chawla, K. (2021). Environmental neuroeconomics: How neuroscience can inform our understanding of human responses to climate change. *Current Opinion in Behavioral Sciences*, 42, 147–154. https://doi.org/10.1016/j.cobeha.2021.08.002

Week 4 (Feb 2, 2023, 11-1, SY 110)

L07: Behaviour

Whitmarsh, L., Poortinga, W., & Capstick, S. (2021). Behaviour change to address climate change. *Current Opinion in Psychology*, *42*, 76–81. https://doi.org/10.1016/j.copsyc.2021.04.002

L08: Habit

Verplanken, B., & Whitmarsh, L. (2021). Habit and climate change. *Current Opinion in Behavioral Sciences*, 42, 42–46. https://doi.org/10.1016/j.cobeha.2021.02.020

Week 5 (Feb 9, 2023, 11-1, SY 110)

L09: Attitudes

van der Linden, S. (2021). The Gateway Belief Model (GBM): A review and research agenda for communicating the scientific consensus on climate change. *Current Opinion in Psychology*, 42, 7–12. https://doi.org/10.1016/j.copsyc.2021.01.005

L10: Values

Bouman, T., Steg, L., & Perlaviciute, G. (2021). From values to climate action. *Current Opinion in Psychology*, 42, 102–107. https://doi.org/10.1016/j.copsyc.2021.04.010

Week 6 (Feb 16, 2023, 11-1, SY 110)

L11: Motivation

Brick, C., Bosshard, A., & Whitmarsh, L. (2021). Motivation and climate change: A review. *Current Opinion in Psychology*, *42*, 82–88. https://doi.org/10.1016/j.copsyc.2021.04.001

L12: Motivated Reasoning

Bayes, R., & Druckman, J. N. (2021). Motivated reasoning and climate change. *Current Opinion in Behavioral Sciences*, 42, 27–35. https://doi.org/10.1016/j.cobeha.2021.02.009

Week 7 (Mar 2, 2023, 11-1, SY 110)

L13: Social Norms

Cialdini, R. B., & Jacobson, R. P. (2021). Influences of social norms on climate change-related behaviors. *Current Opinion in Behavioral Sciences*, 42, 1–8. https://doi.org/10.1016/j.cobeha.2021.01.005

L14: Consumer Behaviour

Habib, R., White, K., Hardisty, D. J., & Zhao, J. (2021). Shifting consumer behavior to address climate change. *Current Opinion in Psychology*, *42*, 108–113. https://doi.org/10.1016/j.copsyc.2021.04.007

Week 8 (Mar 9, 2023, 11-1, SY 110)

L15: Energy Use

Attari, S. Z. (2021). Transforming energy use. *Current Opinion in Behavioral Sciences*, 42, 104–108. https://doi.org/10.1016/j.cobeha.2021.04.008

L16: Organizations

Unsworth, K. L., Davis, M. C., Russell, S. V., & Bretter, C. (2021). Employee green behaviour: How organizations can help the environment. *Current Opinion in Psychology*, 42, 1–6. https://doi.org/10.1016/j.copsyc.2020.12.006

Week 9 (Mar 16, 2023, 11-1, SY 110)

L17: Minority Influence

Bolderdijk, J. W., & Jans, L. (2021). Minority influence in climate change mitigation. *Current Opinion in Psychology*, 42, 25–30. https://doi.org/10.1016/j.copsyc.2021.02.005

L18: Collective Action

Fritsche, I., & Masson, T. (2021). Collective climate action: When do people turn into collective environmental agents? *Current Opinion in Psychology*, 42, 114–119. https://doi.org/10.1016/j.copsyc.2021.05.001

Week 10 (Mar 23, 2023, 11-1, SY 110)

L19: Diversity

Lewis, N. A., Green, D. J., Duker, A., & Onyeador, I. N. (2021). Not seeing eye to eye: Challenges to building ethnically and economically diverse environmental coalitions. *Current Opinion in Behavioral Sciences*, 42, 60–64. https://doi.org/10.1016/j.cobeha.2021.02.025

L20: Climate Justice

Pearson, A. R., Tsai, C. G., & Clayton, S. (2021). Ethics, morality, and the psychology of climate justice. *Current Opinion in Psychology*, *42*, 36–42. https://doi.org/10.1016/j.copsyc.2021.03.001

Week 11 (Mar 30, 2023, 11-1, SY 110)

L21: Denialism

Lewandowsky, S. (2021). Liberty and the pursuit of science denial. *Current Opinion in Behavioral Sciences*, 42, 65–69. https://doi.org/10.1016/j.cobeha.2021.02.024

L22: Education

Ranney, M. A., & Velautham, L. (2021). Climate change cognition and education: Given no silver bullet for denial, diverse information-hunks increase global warming acceptance. *Current Opinion in Behavioral Sciences*, 42, 139–146. https://doi.org/10.1016/j.cobeha.2021.08.001

Week 12 (Apr 6, 2023, 11-1, SY 110)

L23: CPA Recommendations

Amelung, D., Fischer, H., Kruse, L., & Sauerborn, R. (2016). Defogging Climate Change Communication: How Cognitive Research Can Promote Effective Climate Communication. *Frontiers in Psychology*, 7. https://doi.org/10.3389/fpsyg.2016.01340

Harold, J., Lorenzoni, I., Shipley, T. F., & Coventry, K. R. (2016). Cognitive and psychological science insights to improve climate change data visualization. *Nature Climate Change*, 6(12), 1080–1089. https://doi.org/10.1038/nclimate3162

L24: Future Directions

Canadian Psychological Association (2021). Addressing climate change in Canada: The importance of psychological science. *Psynopsis*, *43*(2), 6-8.

Assignments, Course Requirements, and Grading

Writing Assignment 1 10% (Due Feb 3rd)

Midterm Exam 35%

Writing Assignment 2 10% (Due Mar 24th)

Final Exam 45%

Important Dates

Duration of Classes: January 9 - April 10 Reading Week: February 18 - February 24

Last day to drop without academic penalty: March 27

Last day to submit term assignments: April 10

Study Break: April 11 - April 12 Final Exam Period: April 13 - April 27

Course Policies

Late Assignments and Missed Tutorials

A penalty of 5% per day (24 hour period) will be deducted from your assigned grade for late submissions. The last day that we can accept term work is 5 days after the official last day of classes for the term. Late submissions should be uploaded to Quercus in the normal manner.

Email Policy

We will do our best to respond to emails within 72 hours of receiving the email. You should not expect responses to emails outside of normal business hours (M-F 9-5). The course has been designed so that you do not need to work on weekends (unless you choose to), and we ask that you respect the personal time of the instructor and TAs in a similar manner. Email contact information can be found on the Quercus homepage for the course. Please include "PSYC58" at the beginning of the subject line of any email related to the course, and please always use your UofT email address in correspondence about the course. Quercus mail is ok to use, but I find it a little clunky, so prefer normal email.

Changes to the Course

The schedule, due dates, and nature of assignments are subject to change due to extenuating circumstances beyond our control. Some changes may be mandated by the University. Any other changes will be subject to a class vote, where a simple majority of those enrolled in the course must vote in favour of the change.

Accommodation for Personal Reasons

There may be times when you are unable to complete coursework, including completing readings, viewing lectures, or attending tutorials, due to non-medical reasons. If this occurs during the term you should contact the course instructor immediately to discuss a strategy for completing or dropping the course. It is also a very good idea to speak to an academic advisor.

Religious Accommodations

The University has a commitment concerning accommodation for religious observances. I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory

activities on religious holy days not captured by statutory holidays. According to University Policy, if you anticipate being absent from class or missing a major course activity (like a test, or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

Academic Integrity

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, and/or obtaining or providing unauthorized assistance on any assignment. On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

Disability-Related Accommodation Request

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office (http://www.utsc.utoronto.ca/ability/) as soon as possible. AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Please contact 416-287-7560 (tel/TTY) or email ability.utsc@utoronto.ca for more information. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Course Management System Information: Quercus

This course uses the University of Toronto's learning management system, Quercus, to post information about the course. This includes readings, recorded lectures, worksheets, assignment rubrics, access to tests and exams, and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. The site is dynamic and new information and resources will be posted regularly as we move through the term, so please make it a habit to log in to the site on a regular, even daily, basis. To access the course website, go to the U of T Quercus log-in page at q.utoronto.ca. Once you have logged in to Quercus using your UTORid and password, you should see the link or "card" for PSYC58. You may need to scroll through other cards to find this. Click on the PSYC58 link to open our course area, view the latest announcements, and access your course resources. There are Quercus help guides for students that you can access by clicking on the "?" icon in the left side column.

Special note about grades posted online: Please note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in Quercus at any point in the term, until they have been formally approved by the department and posted on ACORN at the end of the course. The department has the right to adjust grades up or down, by a fixed amount that is equivalent for everyone, as they see fit, to maintain standards across sections and years. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

Online Communication Policy

You are required to use your utoronto email address for all course-related communications with the instructor and/or TA, and are expected to check this email address regularly throughout the course to ensure timely access to important information. We will only respond to emails received from a utoronto account when discussing sensitive information, as this is the only way we can verify who we are talking with.

Equity, Diversity, Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Privacy/FIPPA Statement

Personal information is collected pursuant to section 2(14) of the University of Toronto Act, 1971 and at all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act. Please note that this course requires class discussion and presentations of one's work to the group. For more information, please refer to www.utoronto.ca/privacy.

Copyright of Course Materials

Course materials are provided for the exclusive use of enrolled students. You do not have permission to share them or sell them to anyone outside of the course. The materials should not be posted on websites, uploaded to social media sites, printed and distributed or sold to others, nor sold to companies that intend to package them to sell or distribute to other people in print or via the internet. The University will support me in asserting and pursuing my rights, and my copyrights, in such matters. You do have my permission to make your own recordings of any lectures for your own personal use. These may not be distributed, shared, sold, or posted on the internet, in whole or in part, without my permission.

Masks in the Classroom

While the mask mandate has been paused as of 1 July 2022, the use of medical masks continues to be strongly encouraged at U of T Scarborough in indoor settings where physical distancing is not possible. We ask everyone to respect each other's decisions, comfort levels, and health needs. Masks are available at all building entrances at U of T Scarborough and in all classrooms.

Resources

UTSC administrative information, academic support, and well-being:

- Quercus (learning platform for this course)
- Important Dates and Deadlines
- Academic Advising and Career Centre
- Writing Services
- AccessAbility
- Health and Wellness

Department of Psychology Missed Term Work Policy, Winter 2023

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedures outlined below.

Note:

- The following reasons are not considered sufficient for missed term work: travel for leisure, weddings, personal commitments, work commitments, human error.
- · Missed Final Exams are handled by the Registrar's Office and should be declared on eService.
- · Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, accommodations are only possible via the Registrar's Office <u>petition process</u>.

The email address to submit missed term work accommodation requests in PSYC58 is: george.cree@utoronto.ca

ILLNESS OR EMERGENCY accommodations:

For missed work due to ILLNESS OR EMERGENCY, complete the following process:

- 1. Complete the <u>Request for Missed Term Work Accommodations Form.</u>
- 2. Declare your absence on ACORN (Profile & Settings > Absence Declaration)
- Email <u>both</u> of the following items to the course email <u>WITHIN 2 BUSINESS DAYS</u> of the missed work:
 - the Request for Missed Term Work Accommodations Form
 AND
 - a screenshot of your Self-Declared Absence on ACORN

Note:

- If you are unable to submit your request within 2 business days, you must still email your instructor within the 2 business day window to explain the nature of the delay. Exceptions to the 2 business day deadline will only be made under exceptional circumstances.
- · If your absence is declared on ACORN, we do not require any additional supporting documentation (e.g. medical notes) to support your missed term work accommodation request.

ACADEMIC CONFLICT accommodations:

For missed term work due to an ACADEMIC CONFLICT (e.g. two midterms at the same time):

- 1. Complete the Request for Missed Term Work Accommodations Form.
- 2. Take screenshots of your course Quercus pages that demonstrate the conflict.
- 3. Email the form and screenshots to the course email at least two weeks (10 business days) before the date of the activity, or as soon as possible if it was not possible to identify the conflict earlier. Requests sent after the activity deadline may not be accommodated.

Note:

 Multiple assignments due on the same day are <u>not</u> considered conflicts. Students are expected to manage their time effectively to meet assignment deadlines.

- · Back-to-back tests/quizzes are <u>not</u> considered conflicts. Only overlapping activities are conflicts.
- Students are responsible for keeping their course timetables conflict-free. Students who
 register in two courses with overlapping lecture/tutorial/lab schedules will not be
 accommodated.

RELIGIOUS CONFLICT accommodations:

For missed term work due to a RELIGIOUS CONFLICT:

- 1. Complete the Request for Missed Term Work Accommodations Form.
- 2. Email the form to the course email at least two weeks (10 business days) before the date of the activity, or as soon as possible if it was not possible to identify the conflict earlier. Requests sent after the activity deadline may not be accommodated.

ACCESSABILITY SERVICES accommodations:

For missed TERM TESTS due to ACCESSABILITY REASONS:

 Contact your AccessAbility consultant and have them email the course email detailing accommodations required.

For missed ASSIGNMENTS due to ACCESSABILITY REASONS:

- If your desired accommodation is within the scope of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" and you need 3 days):
 - 1. Complete the Request for Missed Term Work Accommodations Form.
 - 2. Email the form *AND* your Accommodation Letter to the course email specifying how many days extension you are requesting.
- · If your desired accommodation is outside the scope of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" but you need more time than that):
 - 1. Contact your AccessAbility consultant and have them email the course email detailing the accommodations required.

Accommodation Procedure:

After submitting your documentation, you will receive a response from your instructor or TA. This form does not guarantee that you will be accommodated. The course instructor reserves the right to decide what accommodations (if any) will be made. Failure to adhere to any aspect of this policy may result in a denial of your request. You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

For missed assignments, do not wait for the instructor's response to resume work on your assignment. Extensions may be as short as one business day, depending on the nature of the illness/emergency. Complete your assignment as soon as you're able, and email it to your instructor.

For an anticipated absence (e.g. a scheduled surgery or an illness with a prolonged recovery period), if you would like to request accommodations in advance, submit a <u>Verification of Illness Form</u> completed by your doctor AND the <u>Request for Missed Term Work Accommodations Form</u> to the course email. Absences can be declared up to 14 days into the future on ACORN.

Missed Accommodations

If an accommodation is granted but a continued illness/emergency prevents you from meeting its requirements, you must <u>repeat</u> the missed term work procedure to request additional accommodations. Please make it clear in your subject line that you are requesting a second accommodation. E.g. If you are given an extension but are still sick and need more time, or if you miss a <u>make-up</u> term test, you must submit another <u>Request for Missed Term Work</u> <u>Accommodations Form</u> and declare your extended absence on ACORN. *Note: In the case of a missed make-up test, an opportunity to write a second make-up test may not necessarily be provided.