GEOGRAPHICAL PERSPECTIVES ON
WORLD ENVIRONMENTAL PROBLEMS
Syllabus for Fall 2022

The goal of this course is to help students understand the range of environmental challenges that characterize our era, and to show how natural science, social science and engineering science contribute to this understanding, and to the prospects for solutions.

1. THE CONTEXT: We are 1/5 of the way through the 21st Century. All of you were born before TikTok, Tinder, "Fake News", Infowars, and QAnon existed. Even before iPhones! And many of you could well be here to see the dawn of the 22nd Century. What will the world look like then? This question is evoked by some bumper-sticker wisdom that comments on the remarkable evidence of human capability: "*I am my ancestors' wildest dream.*" But are we? Will your descendants say that?

2. THE LEARNING OBJECTIVES By the end of the course, if we succeed, you should:

1. be familiar with the array of ecological problems that we face, and understand the scale of their importance to us;
2. be aware of what the range of possible responses to the problems are, noting limits of knowledge, capacity, and will (e.g. what we understand about possible solutions, what we have the skills or resources to do, and what we are prepared to attempt);
3. understand how the problems are interconnected or entangled with one another and with other important dimensions of human ecology and global diversity, and, lastly;
4. recognize what can be done in your discipline or in others to address some aspects of these problems.

3. COURSE ACTIVITIES and GRADING

The course activities will include:

- **Lectures:** The text (see below) is subtitled "**The Science behind the Stories**". Lectures will explore "the stories" and the ways that we approach understanding the stories, determining actions, and measuring success. This is a survey course, so lectures are about ideas supported by evidence, and will present case studies that illustrate the embedded context of the selected environmental problem. Whole courses are given on (and whole careers are based on) research and methods related to any one of the topics we cover, so once the ideas and the context are established, you may well wish to take advanced courses. Some lectures will be presented by guest speakers who will talk about their area of specialization.
- **Readings:** The readings are intended to provide you with a preliminary "state of knowledge" review regarding the science we use to explore the ecological challenges we will be discussing. The textbook is a worthwhile reference book that you can keep and refer to long after you graduate. Its approach to both Science and Stories is significant. The on-line PDFs on the Sustainable Development Goals will familiarize you with one framework that is intended to help shape the global agenda for addressing the challenges.
- **Group research projects:** you will work in small groups on specific research topics, and you will present both written and oral summaries of your findings. For your assigned topic, you will address each of the learning objectives as outlined above and make an in-class presentation at the "Environmental Summit."
- **Evaluation activities:** quizzes on lectures and readings, and group research work.

    Evaluation and Grading

    - Two in-person quizzes on readings and lecture material. ………………..   40 %
    - One written report on your group project …………...…………………   30 %
    - One online presentation of your group project …………………………..   15 %
    - One individual written commentary on the full array of student presentations. 15 %
        - NB: Students on Pass/Fail must complete all the work of the course.

4. READING and STRUCTURE

There are five items from which required readings will be drawn.

- Withgott, J. H., Laposata, M., & Murck, B. (2017). Environment: The Science Behind the Stories, Third Canadian Edition. Pearson Publishing. Toronto.   (Hardcopy and e-version available in the bookstore.)
- Getting Started with the Sustainable Development Goals A Guide for Stakeholders December 2015 https://irp-cdn.multiscreensite.com/be6d1d56/files/uploaded/getting-started-guide-FINAL-PDF-.pdf
- Transforming Our World: The 2030 Agenda For Sustainable Development Sustainable Development.Un.Org A/Res/70/1 https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf
- SDG Report 2021: https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf
- The IPCC Sixth Assessment Report 2021 https://www.ipcc.ch/assessment-report/ar6/

N.B. Lectures and text readings are intended to complement, not duplicate, one another. You are responsible for both. The quizzes will draw on material from the readings—including material that is not explicitly covered in class—and material from the lectures, that is not covered by the book (so coming to class is a good idea). Additional readings may be assigned as needed for special topics.

5. INSTRUCTORS, OFFICE HOURS and CONTACTS.

The instructor for the course is Thomas Meredith. There are also TAs who will be actively involved in your group assignment. TAs will be introduced in a class session, and contact details will be posted on MyCourses. Online Office Hours will be posted.

Guidelines for email communication and for questions arising from class will be outlined online and posted on MyCourses.

6. THE FINE PRINT

instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

Please read the Guidelines for Instructors and Students on Teaching, Learning, and Assessment and this course outline. You will be notified through a pop-up box in Zoom if part of a class is being recorded (see image below). By remaining in sessions that are recorded, you agree to the recording, and you understand that your image, voice, and name may be disclosed to classmates. You also understand that recordings will be made available in myCourses to students registered in the course.

3. The University is committed to maintaining teaching and learning spaces that are respectful and inclusive for all. To this end, offensive, violent, or harmful language may be cause for disciplinary action.

4. As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the Office for Students with Disabilities, 514-398-6009.

5. Many students may face mental health challenges that can impact not only their academic success but also their ability to thrive in our campus community. Please reach out for support when you need it; many resources are available on-campus, off-campus and online.

6. McGill University is on land which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous peoples whose presence marks this territory on which peoples of the world now gather.

7. Content warning: Please be aware that some of the course content may be disturbing for some students. It has been included in the course because it directly relates to the learning outcomes. Please contact the instructor if you have specific concerns about this.

8. If you have difficulty affording food or if you lack a safe and stable place to live and believe that this may affect your performance in this course, I encourage you to contact the Dean of Students who can connect you with support services. If you feel comfortable doing so, please let me know as well, so we can discuss how I can best support your learning.
[adapted from Goldrick-Rab, 2017]

9. End-of-course evaluations are one of the ways that McGill works towards maintaining and improving the quality of courses and the student's learning experience. You will be notified by e-mail when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.

10. In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

11. McGill has policies on sustainability, paper use, and other initiatives to promote a culture of sustainability at McGill. (See the Office of Sustainability.)

12. Guidelines for the use of mobile computing and communications (MC2) devices in classes at McGill have been approved by the APC. No audio or video recording of any kind is allowed in class without the explicit permission of the instructor. Likewise, MC2 devices are not to be used for voice communication without the explicit permission of the instructor.

University Community Behaviour

While it seems self-evident, in this community of ideas, there are standards that must guide our personal interactions. The following addresses one aspect of this.

"Mutual respect is expected at all times amongst instructors, teaching assistants, and support staff at McGill University. It is an academic offence for a student to behave in any way that obstructs teaching and/or research activities. Disciplinary action will be taken for inappropriate conduct towards any instructor, teaching assistant or support staff. You should refer to the Handbook of Student Rights and Responsibilities (the 'Green Book') for McGill's

policies on Code of Conduct. Note http://www.mcgill.ca/email-policy/ for McGill's E-mail policies. Further information is available on the Department of Geography website."

Online Learning Agreement

The material presented on line for classes, whether by instructors, TAs, guest speakers, or other students, is ONLY for use in that course and for assignments that are part of the course. The university guidelines explicitly state that students cannot share or distribute the material from classes outside the context of work required by the instructor for the course.

Material recorded in class cannot be used for any purpose other than activities directly linked to the course and required by the instructor of the course.