GEOGRAPHICAL PERSPECTIVES ON
WORLD ENVIRONMENTAL PROBLEMS
<u>DRAFT</u> (Final to be handed out in class)

1. INTRODUCTION

We are about 1/6 of the way into the 21st Century. All of you were born before smartphones. The first iPhone was released less than 10 years ago. Many of you should be here to see the dawn of the 22nd Century. What will the world look like then?

This course is about "world environmental problems"—factors that will dramatically affect what the world looks like then, and through your lifetime. These problems—or challenges—are closely linked to what we loosely call "sustainable development" (SD). It is the process that will, if successful, lead us to a world we can live happily in as we move into this century. The alternative is not pretty! Literally, SD is taken to mean "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (Brundtland, 1987). There is much to question and to challenge in this definition, and in much of the research, policy development, and action that has taken place since 1987, but, nonetheless, the concept represents a turning point in the story of human development, that is, in the natural history of our unique, intriguing, astonishing and powerful species.

The concept of SD signaled the recognition of vulnerability to the impacts of what we have called "progress". Progress is in quotes, because that too is in an uncertain concept that bears exploration: what are we progressing from? What are we progressing towards? How do we measure advance or retreat? While most agree on the generalities, (less violence, ignorance, poverty, disease and affliction; more peace, enlightenment, prosperity, health and well-being), there are some nuances with important implications (e.g. the consequences of globalization and the loss of national identity and independence, or the emergence of the "Western Diet", or concerns about social isolation in a wired world), and some paradoxes that must be addressed (e.g. how does prosperity link to increased consumption, how can social justice and ecological footprints be reconciled?) Basically, the challenge of sustainable development is to avoid catastrophe, on our otherwise happy journey into a future…a future that we will create by our actions and decisions! This course is intended to help us take bearings in this journey, and perhaps allow you to help shape the direction we choose.

The premise is that, no matter what role YOU choose to play in the evolving future, or no matter what role you are able to play, you will have some influence on how—or whether—we navigate around the challenges we face. More on that later.

2. THE LEARNING OBJECTIVES

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

3. COURSE ACTIVITIES and GRADING

The **course activities** 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. Lectures are about ideas, and case studies that illustrate the ideas. Some lectures will be presented by guest speakers.
- **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. The PDFs will familiarize you with one framework that will 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.
- **Evaluation** activities. These will include
  - Two in-class quizzes that will assess your knowledge of the readings and the lecture material (2 x 30%)
  - One written report on your group project (20%)
  - One oral presentation on your group project (10%)
  - One individual written commentary on the full array of oral presentations (10%)

4. READING and STRUCTURE

There are three 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. (Available in the bookstore as a (relatively) economical loose-leaf edition or as a more expensive soft cover edition. There is also an e-version.)
- Getting Started with the Sustainable Development Goals A Guide for Stakeholders December 2015 (http://unsdsn.org/wp-content/uploads/2015/12/151211-getting-started-guide-FINAL-PDF-.pdf)
- Transforming Our World: The 2030 Agenda For Sustainable Development Sustainabledevelopment.Un.Org A/Res/70/1 https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

Lectures and text readings are intended to complement, not duplicate, one another. You are responsible for both. The tests will draw on lectures and material from the book, including material not covered in class. Material from the lectures, not covered by the book, will also be examinable (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 four TAs -TBA– who will be actively involved in your group assignment. For practical reasons, email communication for the course will be will be limited. Office hours and contacts TBA

7. THE FINE PRINT

1. "McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).(approved by Senate on 29 January 2003)
   "L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/)."

2. "In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded." (approved by Senate on 21 January 2009 - see also the section in this document on Assignments and evaluation.)
   "Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue)."

3. Text-matching Software: In light of the policy on integrity, we reserve the right to use text-matching software for written assignments in this course, or, if plagiarism is suspected, to provide the student with the right to choose an alternative way of attesting to the authenticity of their work.
4. For information on university and department policies for student assessment, please go to http://www.mcgill.ca/geography/studentassessment.
5. Instructor generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.
6. "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."
7. Guidelines for the use of mobile computing and communications (MC2) devices in classes at McGill have been approved by the APC.
8. "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 on Mercury, the online course evaluation system. Please note that a minimum number of responses must be received for results to be available to students."
9. "McGill has policies on sustainability, paper use and other initiatives to promote a culture of sustainability at McGill." (See the Office of Sustainability.)
10. In keeping with McGill's preparedness planning strategies with respect to potential pandemic or other concerns: "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. "Additional policies governing academic issues which affect students can be found in the McGill Charter of Students' Rights"