Course Description
Scientists claim human activity is shifting our planet from the 10,000 year stable Holocene into the Anthropocene, a functionally distinct geographical era where humans are the main drivers of global change. This graduate seminar is one of three - ethics, law, and finance - which are three disciplines identified by the Economics for the Anthropocene academic partnership as integral to human society but incapable of facing the challenges the Anthropocene presents for the human race. It is essential these ‘orphan’ disciplines are redefined to allow for ecological and economic stability and global equanimity for present and future generations. This graduate seminar seeks to deconstruct the current narratives at play in human society responsible for producing today’s contemporary ethical systems. It will explore the role of the narrative in human culture in managing existential terror and forming ethical guidelines, and the consequential impacts on our natural environment. The course will then challenge the current scientific method and epistemic foundations of politics and economics and their ethical implications. Finally, the course will deconstruct Pope Francis’ Encyclical letter *Laudato si’: On care for our common home* (2015) to determine the role Judeo-Christian dogma can play in providing ethical guidelines through spirituality in the Anthropocene. It will challenge and critique these systems, while identifying appropriate characteristics and attributes that can be carried forward into a new ethical narrative suitable for humans in the age of the Anthropocene.

Course Objectives
The 2016 Ethics for the Anthropocene seminar builds upon the main outcomes of the 2015 course, which focused on the definition, the characterization and the analysis of the concept of ethical systems. By losing its contact with the natural, biological and psychological reality of the world, ethics has been defined as an “orphan” discipline. The 2016 course investigates the way ethical systems arise and evolve in order to further discuss their role in shaping social structures and the relationship between humans and nature. The course has 6 main objectives:

1. To explore the concept of narratives for both individuals and societies;
2. To provide theoretical and practical examples of why humans need narratives.
3. To discuss the way science and knowledge helps to develop narratives;
4. To explore the relationship between scientific narratives and ethics.
5. To analyse the way religious narratives change and the way they impact ethical systems.
6. To provide new structured insights to further develop the concept of scientifically-informed ethics for the Anthropocene.

Classes will meet Thursdays at 2:30-5:30 pm and they will be open to graduate students enrolled in the E4A program, including the first, second and third cohort. Students interested in taking the course should contact Professor Peter Brown at peter.g.brown@mcgill.ca.
Faculty
Prof. Peter G. Brown
Department of Geography, Natural Resources and Sciences, and McGill School of the Environment
Address: Room MS3-040, 2111 Lakeshore Road, Ste. Anne de Bellevue, Quebec H9X 3V9
Email: peter.g.brown@mcgill.ca

Student facilitators
Sophie Sanniti - York University, email: srsanniti@gmail.com
Stefano Menegat - McGill University, email: 288780@edu.unito.it
María Juncos - York University, email: mariajuncos1@gmail.com

Learning Objectives
By the end of the course, students will be able to:

1. Challenge and effectively critique the dominant themes inherent in today's globalized economic paradigm.
2. Develop and articulate specific characteristics essential to an ethical human narrative suitable for the Anthropocene.
3. Understand the role of normal science in contemporary societies and conceptualize the crisis of modern science in dealing with the challenges of the Anthropocene.
4. Define the main critics to the Cartesian model and manage the alternatives proposed by the recent debate about epistemology.
5. Explore the ethics of quantification in order to frame a new ground for natural and social sciences.
6. Bridge the epistemological debate to politics and power. Picture the current state of normal science in search for its political and economic justification.
8. Contribute to the analysis and rethinking of fundamental Judeo-Christian dogmas that encouraged the neoclassical or mainstream economic paradigm in order to face the new ethical challenges of the Anthropocene.

To achieve the above learning objectives the course has been structured and divided in three modules, each under a topic of interest with a related research question. Each student facilitator will be responsible for thoroughly covering, analyzing, and discussing one of the three modules with the other fellow students throughout the course, based on their specific area of interest. In addition to the main research question, each topic has one or two recommended books as core course readings and references throughout the semester, in addition to the assigned readings for each weekly lecture.
Module 1 topic: Humanity and Culture: The Role of the Narrative  
Student facilitator: Sophia Sanniti, York University  
Main question: Why is culture essential in human existence, and how does it shape the ethical system to which social groups subscribe? 
Recommended books  

Module 2 topic: Knowledge and Epistemology: Scientific Narrative in the Anthropocene  
Student facilitator: Stefano Menegat, McGill University  
Main question: How can an ethically based science inform the policy-making processes in the Anthropocene? 
Recommended books  

Module 3 topic: Fundamentals of the Judeo-Christian beliefs: Their Important Role as a Spiritual and Religious Narrative in the Anthropocene  
Student facilitator: María Juncos, York University  
Main question: Taking Pope Francis’ Encyclical Letter Laudato si: On Care for Our Common Home (2015) as a starting point for analysis, how are fundamental Judeo-Christian dogmas being (or could be) reinterpreted for a new spiritual renaissance amid the pressing ethical challenges of the Anthropocene? 
Recommended books  

Each module’s main topic is covered in four classes with specific subtopics for each class for a total of twelve classes –four per topic. Each lecture has assigned readings. Based on the main topic they agreed to cover during the course, each student facilitator is responsible for presenting and discussing with fellow students the assigned readings for that topic and subtopics. This means that each student facilitator is fully responsible for presenting and directing the discussion of at least four of the seminar’s classes. The other fellow students are responsible for reading all assigned material and participating in the class discussion. Note that student facilitators can adjust their reading list up to one week prior to the associate lecture.
**Course Outline**

This class will be on **Thursday 2:30-5:30 p.m.** (via ZOOM) from September 16 to December 8, 2016 for a total of 13 three-hour classes. The tentative schedule is as follows:

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<tr>
<th>Module</th>
<th>Topic: Humanity and Culture: The Role of the Narrative</th>
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<tbody>
<tr>
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<td><strong>Lecture</strong></td>
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<td><strong>Subtopics</strong></td>
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<td><strong>Activity/Guest</strong></td>
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<td>1</td>
<td>Class 1: Managing existential terror and the myth of progress</td>
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<td>Sheldon Solomon</td>
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<td>2</td>
<td>Class 2: The cruciality of culture</td>
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<td>Andrew Hoffman</td>
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<td>Sept 22</td>
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<td>3 *</td>
<td>Class 3: Free market ideology</td>
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<td>Tim Jackson</td>
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<td>Sept 29</td>
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<td>4</td>
<td>Class 4: Ecological and psychological well-being in the Anthropocene</td>
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<td>Tim Kasser</td>
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<td>5</td>
<td>Class 1: Reading nature in the Anthropocene: ontology and epistemology</td>
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<td>6 *</td>
<td>Class 2: Measuring nature-society relationship: epistemology in the Anthropocene (joint class)</td>
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<td>Andrea Saltelli</td>
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<td>Oct 20</td>
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<td>7</td>
<td>Class 3: Natural sciences, politics and power</td>
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<td>Emanuela Gambini</td>
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<td>Oct 27</td>
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<td>8 *</td>
<td>Class 4: Social sciences in the Anthropocene, towards the epistemic revolution</td>
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<td>Bruno Latour</td>
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<td>9</td>
<td>Class 1: A closer analysis at Pope Francis’ Encyclical Letter <em>Laudato si</em>: On Care for Our Common Home, Part I</td>
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<td>10</td>
<td>Class 2: A closer analysis of Pope Francis’ Encyclical Letter <em>Laudato si</em>, Part II</td>
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<td>Peter Timmerman</td>
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<td>Nov 17</td>
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<td>11</td>
<td>Class 3: A closer analysis at Pope Francis’ Encyclical Letter <em>Laudato si</em>, Part III</td>
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<td>Leonardo Boff (to be confirmed)</td>
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<td>Nov 24</td>
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<td>12 *</td>
<td>Final paper presentations and discussion.</td>
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<td>13*</td>
<td>Class 4: Can we strive to achieve a unifying vision for a new economy for the Anthropocene? Last reflections.</td>
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<td>Manfred Max-Neef</td>
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* Open to Finance and Law E4A Seminar groups as joint classes
Restriction
This class will only be open to the other E4A students and cohorts from McGill University, York University and the University of Vermont.

Materials
All assigned readings and other course materials will be in a Dropbox folder that will be open for the course. The recommended books for each topic need to be obtained by the students. They can be found in the libraries of the E4A universities.

Structure of each class
The student facilitators will conduct each class as follows:
1. An introduction to the class subtopic by the student facilitator.
2. A discussion of the weekly readings guided by the student facilitator and engaging the other students in class.
3. Presentation / lecture by guest lecturer (if any) with a question and answer session.
4. The class concludes with an activity that could include multimedia, in-class exercises or a joint class with the other two E4A student-led seminars.

Evaluation
- Preparation, organization and presentation of week’s readings 20%
- Leadership in guiding the discussion of the week’s subtopic 15%
- Class attendance and participation in each class discussion 15%
- Presentation about his/her paper and discussion with fellow students 10%
- Individual paper on each selected topic due December 22 40%

Reflection
During the final lecture, the students will reflect on what has been presented throughout the semester: how the readings and discussions have enriched and influenced their worldview, as well as their own values and ethics for the challenges of the Anthropocene, and what they have learned and how they are going to apply it in their life.

Course activities for each student facilitator
1. Prepare and lead four classes, based on his/her selected topic.
2. Appraise the readings he/she assigned for each subtopic, under his/her selected topic.
3. Lead the class discussions of his/her selected topic/subtopics.
4. Engage the other students in the discussion.
5. Attend classes and participate in the discussion of the other topics/subtopics.
6. Reflect on the readings and their learning.
7. Deliver a 30 minutes max presentation on his/her final paper at the beginning of December, based on what have been learned and discussed throughout the course.
8. Write an individual 15-page in-depth paper (not including references/bibliography) on his/her selected topic *due December 22.
Module I: Humanity and Culture
The Role of the Narrative in Depicting Ethics for the Anthropocene

Learning objectives
1. Challenge and effectively critique the dominant themes inherent in today’s globalized economic pro-growth paradigm that inhibit an ethical approach to the Anthropocene
2. Develop and articulate specific characteristics essential to an ethical narrative suitable for human society in the Anthropocene

Class 1: Managing existential terror and the myth of progress (September 16)
This class will explore humanity’s inherent fear of death and the resulting cultural constructs built to buffer this potentially debilitating terror. The class places a particular focus on the role of progress, the cultural dimensions of a globalized society, and its impact on the natural world and human psyche.
Guest Lecturer: Sheldon Solomon
Key words: Terror Management Theory; Existential Anxiety; Progress; Globalization; Social Collapse
Readings

Class 2: The cruciality of culture (September 22)
This class will explore the role culture plays in the interpretation and understanding of climate science and the barriers to effective action brought about by human psychology, social norms, and institutional infrastructure.
Guest lecturer: Andrew Hoffman
Key words: Climate change; Behavioural science; Cultural norms; Societal Institutions
Readings
Class 3: Free market ideology
(Open to Finance seminar)
(September 29)
This class will explore the ethical implications of a growth-oriented economy through the psychological and behavioural influences of money and the seemingly systemic endorsement of free market ideology in contemporary (Western) consumer culture.

Guest lecturer: Tim Jackson

Key words: Free Market Ideology; Growth; Behavioural Economics; Morality

Readings

Class 4: Ecological and psychological well-being in the Anthropocene
(October 6)
This class will explore humanity’s past and present relationship to the natural world and determine the importance of strengthening these relations in the face of the Anthropocene to enhance both ecological and psychological well-being.

Guest lecturer: Tim Kasser

Key words: Human-nature relations; Ecopsychology; Planetary domination;

Readings

**Module II: Knowledge and Epistemology**

*Scientific Narrative in the Anthropocene*

Learning objectives
1. Understanding the role of normal science in contemporary societies and conceptualizing the crisis of modern science in dealing with the challenges of the Anthropocene.
2. Defining the main critics to the Cartesian model and managing the alternatives proposed by the recent debate about epistemology.
3. Exploring the ethics of quantification in order to frame a new ground for natural and social sciences.
4. Bridging the epistemological debate to politics and power. Picturing the current state of normal science in search for its political and economic justification.
5. Imaging the future of education and policy-making processes under alternative epistemological approaches.

Class 1: Reading nature in the Anthropocene: ontology and epistemology (October 13)
Short description/explanation of subtopic: This sub-topic focuses on the origins and the development of modern science. The class is divided into three parts: the first one introduces the ontological concept of nature in western philosophical tradition. The second part introduces the concept of science, as well as the epistemological posture of western societies during the past centuries. The third part proposes a link with the other modules, by opening a discussion about the role of human beings and human knowledge in the Anthropocene.
Key words: Ontology, Epistemology, Anthropocene, Cartesian dream, normal science.
Readings

Class 2: Measuring nature-society relationship: epistemology in the Anthropocene (joint class) (October 20)
Short description/explanation of subtopic: The sub-module aims to explore the idea of quantification, and to explain how and for what purposes society needs to quantify different phenomena. The first part of the class introduces the way western thought deals with the concept of complexity. The second part will host a presentation from Andrea Saltelli (University of Bergen) on ethics of quantification, which will be followed by a discussion with the students. The third part of the class will be oriented to discuss some of the main outcomes of Saltelli’s lecture with a focus on the concepts of post-normal science and traditional knowledge.
Key words: Commodification of science, Ethics of quantification, post-normal science, traditional knowledge
Guest lecturer: Andrea Saltelli
Readings
3. Revised version Saltelli, A., and Giampietro, M. (2016). What is Wrong with Evidence Based Policy, and How Can it be Improved?

Class 3: Natural sciences, politics and power (October 27)
Short description/explanation of subtopic: Building on the topics emerged from class 1 and 2, the sub-module aims to re-define the idea of natural sciences in a context of post-normal science. The first part of the class will be held by Emanuela Gambini (Queen University - London) and will focus on life and bioethics within a land ethics framework. The second part will include an open discussion with the lecturer and the peers on the concepts of natural sciences drawing from
examples of knowledge management for policy-making in traditional communities. The third part will present insights from philosophy useful to better understand the role of science and scientific institutions in defining power relationships in contemporary society.

**Key words:** Natural and life science, land ethics, bioethics and biopolitics, traditional knowledge, political and economic power

**Guest lecturer:** Emanuela Gambini

**Readings**

**Class 4: Social sciences in the anthropocene, towards the epistemic revolution**  (Nov 3)
Short description of subtopic: The fourth sub-module proposes a discussion on the epistemic foundations of two important disciplines: politics and economics. One third of the class will be held by Bruno Latour and the second third by Peter Brown, both discussing the concept of politics and economics. The two lecturers will provide alternative approaches to political ecology, building on different ontological perspectives. The third and last part of the class will wrap-up the discussion, by providing a further reflection on the idea of epistemic revolution, and the position that scientific and educational institutions, like academia, could embrace in order to provide effective and useful insights about the challenges posed by the anthropocene.

**Key words:** political science, democracy, epistemic revolution, ecological economics, education, university

**Guest lecturer:** Bruno Latour

**Readings**

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**Module III: Fundamentals of the Judeo-Christian Beliefs**

*Their Important Role as a Spiritual and Religious Narrative in the Anthropocene*

**Learning objective:** Contribute to the analysis and rethinking of the fundamental Judeo-Christian dogmas that encouraged the neoclassical or mainstream economic paradigm in order to face the new ethical challenges of the Anthropocene.

Religion is unquestionably the most powerful institutional force in society that directly influence values and beliefs. The Judeo-Christian worldview is the predominant religious and cultural perspective in the world.

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**Class 1: A closer analysis at Pope Francis’ Encyclical Letter Laudato si’:**
On Care for Our Common Home, Part I  
(November 10)

Description: This class starts the discussion of Pope Francis’ Encyclical Letter Laudato si’ focusing on its importance as a critical motivator for action on climate change and other environmental challenges in the 21st century. We will examine its bold attempt, as a theocentric document, to reevaluate the traditional anthropocentric Judeo-Christian worldview by elevating the human-nature relationship beyond political, scientific and economic considerations- to a faith issue in the Catholic Church’s religious teachings. Also, important discourses of the Encyclical Letter in the Introduction (Nothing in this World is Indifferent to Us, United by the Same Concern, and Saint Francis of Assisi), Chapter 1 (What is happening to Our Common Home) and Chapter 2 (The Gospel of Creation) are going to be explored.

Key words: Theocentric, anthropocentric, Judeo-Christian worldview, Christianity, religion, faith, Western culture, human-nature relationship

Readings

Class 2: A closer analysis of Pope Francis’ Encyclical Letter Laudato si’, Part II  
(November 17)

Description: This class goes further in the discussion of the Pope’s Encyclical Letter Laudato si’, and with the guidance of our guest lecturer, Prof. Peter Timmerman, we will explore the answer to the following questions addressed by him in several of his articles that are assigned for this class: Is Christianity in fact to blame for the destruction of the environment? If it is to blame, has Christianity been misinterpreted with regard to the environment? What precipitated the dualistic worldview that contributed to the split between humanity and the rest of nature from both, the theological and secular European perspectives? Buddhism and Taoism are two Eastern philosophies that have fast spread in Western thought since the mid-20th century and are most relevant to environmentalism. Could Buddhism and Taoism be helping us to rethink Judeo-Christian underpinnings with the teachings of “The Middle Way”, “dependent co-origination”, and the conditions of interconnectedness, semipermeability and polarity inherent in life? During this discussion, we will also look at some key discourses of Laudato si’ in Chapter 3 (The Human Roots of the Ecological Crisis) and Chapter 4 (Integral Ecology) of Laudato si’.

Guest lecturer: Prof. Peter Timmerman

Key words: dualistic, Christianity, Judeo-Christian worldview, Buddhism, Taoism, The Middle Way, dependent co-origination, interconnectedness, semipermeability, polarity

Readings
2. A series of short articles by guest lecturer, Prof. Peter Timmerman, in Probe Post, Pollution Probe Foundation:
   • Summer 1988. “On Earth as it is in Heaven”: Christianity and the Environmental Challenge, pp. 16-19
   • Fall 1988. Zen and the Art of Environmental Maintenance. Probe Post, Pollution Probe Foundation, pp. 22-26
   • September 1989. Butterflies and Philosophers, pp. 26-27
Class 3: A closer analysis at Pope Francis’ Encyclical Letter Laudato si’,
Part III (November 24)
Description: In this class we will focus on the methodological similarities, dissimilarities and tensions that have existed between the three most driving forces of ethics: religion, economics and science, to better comprehend their interconnectedness in shaping human affairs and the cultural organization of society. Most importantly, and after considering the pros and cons, how could religion work (specifically Christianity and the influence of Buddhism) in balance with science and economics as we understand the multidimensional complexities related to the human-nature relationship, and the environmental problems this relationship has brought to life on Earth. During this discussion, we will also look at some important final messages of Laudato si’ in Chapter 5 (Lines of Approach and Actions) and Chapter 6 (Ecological Education and Spirituality).
Guest lecturer: Leonardo Boff (to be confirmed) http://liberationtheology.org/people-organizations/leonardo-boff/
Key words: similarities, dissimilarities, tensions, religion, economics, science, ethics, human-nature relationship, multidimensional, complexity
Readings

Class 4: Can we strive to achieve a unifying vision for a new economy in the Anthropocene?
(joint class) (December 8)
Description: In the last class of this module we will discuss Dr. Manfred Max-Neef’s postulates for a new economy -including barefoot economics and his Human Scale Development proposal; Dr. Peter G. Brown’s ethics of re-embedding economics; and E. F. Schumacher’s Buddhist Economics. What are the common grounds of these proposals and Pope Francis’ Encyclical Letter? What are the similarities and dissimilarities? Is there hope of finding a unifying vision in religion, economics and science for the future of humanity amid the imminent threat of climate change?
Guest lecturers: Dr. Manfred Max-Neef http://www.rightlivelihood.org/max-neef.html and http://www.max-neef.cl/
Key words: Unifying vision, new economy, common grounds, barefoot economics, Human Scale Development, re-embedded economics, Buddhist Economics

Readings