



Political Science 3GC3:

# GLOBAL CLIMATE CHANGE

Autumn Term 2017

Professor: Dr. Robert O'Brien  
Office: KTH 519  
Classes: Mondays 2:30 - 4:30, Wednesdays 2:30 - 3:30  
MDCL 1010  
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Climate change threatens the health of the planet and the future of our species. This course provides students with an introduction to the domestic and international politics of climate change. The topic will be pursued by considering contributions from climate science, fiction, economics, philosophy, political economy, political science and international relations. It will use lectures, readings, films, class discussions and simulations to develop student understanding of the large scale climate challenges facing humanity over the rest of this century. The final month of the term will be devoted to engaging in two simulations – one on energy use and the other on international climate negotiations. The simulations are designed to give students hands on experience in dealing with the difficulty of finding climate solutions.

## Learning Objectives:

Following completion of the course students should be able to convincingly answer the following questions:

1. What causes climate change and what are the likely impacts on the natural environment?
2. What implications does climate change have for human society?
3. What options are available in response to the threats posed by climate change?
4. What are the significant climate issues and options for a particular country or region of the world?
5. How must energy use change in order to meet climate targets?
6. What are the complexities involved behind negotiating an international climate agreement?

## Requirements:

Students will be expected to attend weekly classes (3 hours), do assigned class readings, write a book and film review, take an in class test based on the lectures and readings, participate in two simulations, complete a group research project and submit a self-evaluation of the experience. **There is no final exam in the course.** This course moves quickly and requires your **active participation**. **If you are unable to participate or not willing to put in the work, consider transferring to another course.** I have a waiting list for this course.

## Required Reading:

Barbara Kingsolver, *Flight Behavior* (Harper Collins 2012).

Michael E. Mann and Tom Toles *The Madhouse Effect: How Climate Change Denial is Threatening Our Planet, Destroying our Politics and Driving Us Crazy* (New York: Columbia University Press 2016).

## Marking Scheme:

Film review	10%
Book review	10%
Written Test	25%
Participation	20%
Group Research Project	25%
Self-evaluation of group work	10%

Your final mark will be a combination of individual and group work. Guidelines for the book and film reviews are at the end of this syllabus. They are each worth 10% of your mark. A one hour in class test based on the readings and lectures is worth 25% of your mark. The participation component is 20% of your mark. It covers class attendance and participation in discussions and the simulations.

Students will be required to conduct a **group research project** that must be written up and submitted in the last week of term. This will be worth 25% of your mark. Each group will have approximately 7-8 people. You will be asked to write a 20 page (approximately 3 pages per group member) report on the climate issues facing a particular country or region. You will be expected to draw upon academic books and journals, as well as **reliable** internet sources such as reports and position papers from key actors and NGOs. The research report is due on the day of the world climate simulation.

Do not underestimate the difficulty of doing a group research project. Make sure you keep notes on your contributions for your self-evaluation, make maximum use of allotted class time, and leave sufficient time for editing and writing.

Each group will be required to participate in the international climate negotiation simulation. Your goal will be to work with other countries to achieve an effective climate change treaty while representing the interests of your country. Your negotiating position should be informed by the information you compiled in the groups research paper. Further details are provide in the guide below.

Finally, each student will be required to write a **self evaluation** of their group work. This will be worth 10% of your final mark. This evaluation must be 6 pages long and describe your contribution to, and evaluation of, the group research project and simulation. The evaluation should have three parts:

- I. Describe your intellectual and practical contributions to group discussion, report writing and simulation. Did you raise any key issues or concepts? Did you do too much work or not enough?
- II. Critically evaluate your group research project and participation in the negotiation. Were you pleased with the results, what were its strengths or weaknesses, what were the major problems in the project and the negotiations?
- III. Explain what you would have done differently if you were the only one researching and writing the report and participating in the simulation. How would an individual study been different? Do you think it would have been stronger or weaker than the group report? Why?

The self-evaluation is due one week after the last meeting of the course. It is a very important element of the course.

## Academic Dishonesty:

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at [www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity).

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

## Academic Accommodation of Students with Disabilities:

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail [sas@mcmaster.ca](mailto:sas@mcmaster.ca). For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities.

## Late Penalty:

Late papers and other marked assignments will be penalised at the rate of three (3) percent of the grade for that assignment per day, including weekend days, except in the most extenuating of circumstances.

## Faculty of Social Sciences E-mail Communication Policy

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all e-mail communication sent from students to instructors (including TAs), and from students to staff, must originate from the student's own McMaster University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion.

If you wish to communicate with me about an important issue please do so in person or over the phone. I receive a large volume of e-mail and may miss your message or delete it by error. I will not accept assignments by e-mail. Do not e-mail me requesting information that is already in this reading list. Do not expect me to read or respond to e-mail in the evenings or on weekends.

## Course Modification Statement

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

Please let me know if you have any questions.



## Lecture and Seminar Plan

### **Week 1: Introduction**

Hour 1: Climate Change Introduction

**Date**

6 Sept

**Assignment:**

Read *Flight Behavior*

### **Week 2: The Science**

Hour 2: *Film 1: Before the Flood*

11 Sept

Read *Flight Behavior*

Hour 3: *Film 1: Before the Flood*

Hour 4: Reviewing the Science

13 Sept

Read *Flight Behavior*

### **Week 3: Climate Change and History**

Hour 5: Learning from Medieval warming

18 Sept

Read *Flight Behaviour*

Hour 6: Origins of Fossil Fuel Capitalism

Hour 7: *Flight Behaviour* discussion

20 Sept

### **Week 4: Ethics and Climate Change**

Hour 8: Intergenerational Storms

25 Sept

**Book Review Due**

Hour 9: Moral Corruption

Hour 10: Discounting the future group work

27 Sept

Read *The Madhouse Effect*

### **Week 5: Politicization and North American Politics**

Hour 11: Politicization of Science

2 Oct

Read *The Madhouse Effect*

Hour 12: Climate Politics US

Hour 13: Climate Politics Canada

4 Oct

Read *The Madhouse Effect*

### **Week 6 Reading Week**

9,11 Oct

Read *The Madhouse Effect*

### **Week 7: Climate Politics**

Hour 14: *Film 2: This Changes Everything*

16 Oct

Hour 15: *Film 2: This Changes Everything*

Hour 16: North / South Climate Politics

18 Oct

### **Week 8: Thinking about Climate Change**

Hour 17: Psychology of dealing with Climate Change

23 Oct

**Film Review Due**

Hour 18: Climate Change and Violent Conflict

Hour 19: Indigenous peoples, religions and Climate Change

25 Oct

### **Week 9: Transition Week**

Hour 20: Guest Speaker: Standing Rock

30 Oct

**Class Test**

Hour 21: Class Test

Hour 22: Energy simulation intro

1 Nov.

### **Week 10: Energy Simulation**

Hour 23: Energy Simulation

6 Nov

Hour 24: Energy Simulation

Hour 25: Energy Simulation

8 Nov

### **Week 11: Group Project I**

Hour 26: World Climate Simulation Intro

13 Nov

Hour 27: World Climate team meetings

Hour 28: World Climate Simulation prep

15 Nov

### **Week 12: Group Project 2**

Hour 29: World Climate prep

20 Nov.

Hour 30: World Climate prep

Hour 31: World Climate prep

22 Nov

**Week / 13: World Climate Simulation**

Hour 32: World Climate Simulation

27 Nov

**Reports due in class**

Hour 32: World Climate Simulation

Hour 34: World Climate Simulation

**Week / 14: Wrap up**

Hour 32: World Climate or Self evaluation

4 Dec.

Hour 32: Self evaluation

Hour 34: Self evaluation hand in

6 Dec

**Self-evaluation due**

**Online Sources:**

The issue of climate change is highly politicized and many online sites have been created. Some of these sites host scientific data while others are engaged in polemics. They range from informed commentary by climate scientists to propaganda generated by the fossil fuel lobbies and misinformation spread by cranks. Exercise caution when accessing online sites. How credible are the sources? Do they have a particular political axe to grind? The following are some recommended links:

*On the scientific consensus on climate change:*

'Climate change and the integrity of science' *Science* 7 May 2010: Vol. 328 no. 5979 pp. 689-690.  
<https://www.sciencemag.org/content/328/5979/689.full>

Full text of an open letter from 255 members of the US National Academy of Sciences in defence of climate research. <http://www.theguardian.com/environment/2010/may/06/climate-science-open-letter>

Nasa's Climate Change: Vital signs of the Planet website  
<http://climate.nasa.gov>

For reliable scientific discussion of climate change and a wealth of good links:  
<http://www.realclimate.org>

I also like Sceptical Science:  
<http://www.skepticalscience.com>

The only major free online international newspaper that has excellent environmental coverage is *The Guardian* (UK): <http://www.theguardian.com/environment/climate-change>

It also runs an interesting blog called "Climate Consensus: the 97%"  
<http://www.theguardian.com/environment/climate-consensus-97-per-cent>

*Climate Action Networks:*

350.org: <http://350.org>

Network for Climate Justice: <http://climatejusticenetwork.org/climate-justice/>

Carbon Trade Watch: <http://www.carbontradewatch.org>

You can also find a long list of the top 101 top climate change resources at:

<http://www.environmentalsciencedegree.com/climate-change/>

**Videos**

The Embattled Scientist Who Fought Back:

<http://www.youtube.com/watch?v=pizGf7HEIA8#t=93>

There is Global Warming and it is Snowing:

<http://www.msnbc.com/all-in/watch/theres-global-warming-and-its-snowing-105637955899>

## Group Research Project

You have been tasked by the leader of your country to put together a team to negotiate an international climate change agreement. This will require you to prepare a climate change report for your country. Your group must write a report that sets out your positions and then engage in the international climate change negotiations. The report requires the following sections:

- i. *Carbon footprint:* What is its past, present and likely future carbon emissions trajectory, what sectors are most responsible for emissions?
- ii. *Political context:* Who stands to gain or lose from climate change action, what is the balance of forces in favour and against action? Can political opposition be overcome or bought off?
- iii. *Past positions:* What were the country's previous international bargaining positions with regard to climate change negotiations?
- iv. *Desired outcome:* What kind of agreement would be the most desirable for the country?
- v. *Negotiation position:* what is your negotiating strategy and what offers you are willing to make? What are your fall back positions or second best strategies? What type of arguments are you willing to make in the negotiations?
- vi. Initial World Climate offer

### **Write up:**

- the report in the form of a briefing paper for the head of government of your country.
- 20 pages double spaced maximum (26 for Developed or Developing Country Other), excluding bibliography

### **Country reports needed for:**

- China
- European Union
- India
- United States
- Developed Country Other (Australia, Canada, Japan, Russia, South Korea)
- Developing Country Other (South Africa, Brazil, Bangladesh, Nigeria, Indonesia)

### **Getting started:**

For initial climate change data for your country start with the World Climate Data Explorer created by the World Resources Institute. It can be found at:

<http://www.wri.org/our-work/project/cait-climate-data-explorer>

For the political part of the negotiations you can prepare by running some equity scenarios with the Equity Explorer also created by the World Resources Institute. It can be found at:

<http://cait2.wri.org/equity/>



## Book and Film Review Guidelines

### Book Review

Write a 1500 word (maximum) critical review of *Flight Behaviour*. Make sure you address the following questions:

- How does climate change reveal itself in the novel?
- What are people's reactions to climate change?
- What does the novel tell us about climate change?
- What are the advantages and disadvantages of using a novel to understand climate change?

### Film Review

Write a 1500 word (maximum) review of the two films viewed in this class. Make sure you address the following questions:

- What is the primary message of each film?
- In what ways are they similar?
- In what ways are they different?
- Did you find one more compelling than the other?

This reading list is in draft form and was last updated May 30, 2017