PA 5715 Syllabus
Survey of Current Topics in Science, Technology and Environmental Policy
Spring 2018

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OFFICE HOURS Thursdays 10 am – 12 noon (except Feb. 1)

Class Meeting Time: Wednesdays, 4-5:30 pm Humphrey School 15

The objective of this course is to explore current topics at the interface of public policy with science, technology, and the environment. You will gain an understanding of current “hot” topics in science, technology and environmental policy; further develop your critical thinking skills; develop discussion facilitation skills; and understand some of the social and historical contexts that have led to the current topics. The class will be taught in a seminar style, with the expectation that you will take significant responsibility, including leading at least one discussion session.

Course Structure

The course is structured in six modules of two class sessions, with an introductory session and two synthesis sessions in addition to the modules. Each module is centered on a single book which you will be asked to read in its entirety by the first session of the module. You will be assigned to groups and asked to lead the discussion in the first session of each module. You will also write brief reflections on each book for the first session of each module.

Required Texts
We will begin with the following book:
The Righteous Mind: Why Good People Are Divided by Politics and Religion by Jonathan Haidt

I involve students in selecting topics and books for the course. If you have ideas, let me know. The currently proposed subjects and books appear in each module of the syllabus.
GOALS

- Gain an understanding of current “hot” topics in science, technology and environmental policy;
- Develop critical thinking skills;
- Develop discussion facilitation skills;
- Understand the social and historical contexts; and
- Become a discerning participant/observer in science, technology and environmental policy.

Diversity is a welcome and healthy component to our class. This includes diversity of race, diversity of gender, diversity of abilities, diversity of opinions, diversity of perspectives, and diversity of backgrounds. Don’t just be tolerant of diversity – bring out your diversities and help make the class even more interesting.

GRADING

Overall Participation: 30%
You are expected to actively participate by preparing for class ahead of time, completing the readings, and by asking questions and participating in discussions in class.

Class Group Facilitation: 10%
You will have an opportunity to lead a class discussion in one of the modules in a small group. All group members are expected to contribute equally to the activity. Members of the class will complete an evaluation for the facilitating team.

Essays: 60%
There will be one short essay and one responsive post on each book posted to the Moodle online forum and 2 longer essays that will enable students to synthesize ideas across more than one of the books read during the semester. They will be graded for content, critical thought, and clarity of communication. The short essays will all be due for posting on the Moodle site in the Q & A forum by midnight of the Monday before we are first scheduled to discuss each book. The comments on other students’ essays should be posted by 12 noon on the following Wednesday so that all of us have time to review them before class Wednesday afternoon. The short essay and forum comment for each book will be 6% of the grade; the two longer essays will account for 12% each.

Students may change grading options during the initial registration period or during the first two weeks of the semester. The grading option may not be changed after the second week of the term.

Generally, the final course grade will conform to the following guidelines: A 4.00 outstanding achievement relative to course expectations
- A- 3.67
- B+ 3.33
B  3.00 achievement above course expectations
B-  2.67
C+  2.33
C   2.00 achievement meeting course expectations
C-  1.67
D+  1.33
D   1.00 achievement below course expectations
F   0.00 failure to meet the course expectations

However, please note that since this is a graduate class, I will not necessarily assign final
grades to a curve – it is my goal (and yours too, I hope!) to have each of you receive an A.

You, the student, are responsible for knowing the UM Board of Regents Student Conduct
Code.

Academic dishonesty in any portion of the academic work for a course shall be grounds for
awarding a grade of F or N for the entire course. Academic dishonesty is a violation of the
student conduct code and is broadly defined as “any act that violates the rights of another
student in academic work or that involves misrepresentation of your own work. Scholastic
dishonesty includes, but is not limited to: “Submission of false records of academic
achievement; cheating on assignments or examinations; plagiarizing; altering, forging, or
misusing a University academic record; taking, acquiring, or using test materials without
faculty permission; acting alone or in cooperation with another to falsify records or to
obtain dishonestly grades, honors, awards, or professional endorsement.”

Plagiarism is an important element of this policy. It is defined as the presentation of another’s
writing or ideas as your own. Serious, intentional plagiarism will result in a grade of “F” or
“N” for the entire course. For more information on this policy, help with proper citation in
writing, and a helpful discussion of preventing plagiarism, please consult the University
Libraries tutorial and the Center for Writing website. Students are urged to be careful that
they properly attribute and cite others’ work in their own writing.

In addition, original work is expected in this course. It is unacceptable to hand in assignments
for this course for which you receive credit in another course unless by prior agreement with
the instructor. Building on a line of work begun in another course or leading to a thesis,
dissertation, or final project is acceptable, providing you have discussed it with one of us in
advance. If you have questions about what constitutes academic dishonesty or plagiarism,
please talk to us!

Incomplete: A grade of Incomplete will given only if you and one of us have agreed to the
conditions under which you will complete the course prior to the end of the semester, and
your reasons for requesting the incomplete are compelling. An incomplete will only be
granted under extraordinary circumstances. The agreement must be in writing, and the
incomplete must be completed within one year (the grade will then revert to an F).

Course Withdrawal – Students may withdraw from the course through the second week of the
term without permission. After the second week, students will be required to obtain
permission from their advisor and course instructor and a “W” will remain on their transcript. Withdrawals are not possible after the eighth week of the term.

COURSE SCHEDULE

**Wednesday, Jan 17**  
Introductions, course objectives, methodology  
We will practice the World Café methodology we will use for the course.

**Required Readings (see Moodle site)**

The Art of Powerful Questions by E. Vogt et al  
Café To Go  
Summaries of World Café and Powerful Questions  
W. Berger, *A More Beautiful Question*, Ch. 1

**Module 1**

**Themes**: social psychology and neuroscience, sources of moral decision-making, influence of psychology and brain science on policy and politics

**Wednesday, Jan 24**  
**Group 1 to lead discussion**  
**Required Readings:**

- *The Righteous Mind: Why Good People Are Divided by Politics and Religion* by Jonathan Haidt  
Assignment: Submit through Moodle Q & A forum a brief essay that: 1) identifies the most important assertion Haidt makes and briefly explains why you think so; and 2) evaluates the author’s main argument; 500 words maximum. In addition, comment on the substance of at least one other student’s essay.

**Wednesday, Jan 31**  
Continued discussion of *Righteous Mind*

**Optional Readings:**

Available on Moodle
Module 2

Themes: genetics, genetic modification, genes and health care

Wednesday, Feb 7

Required Readings: The Gene by Siddhartha Mukherjee

Assignment: Write an essay of no more than 500 words answering these questions: (1) what issue raised in the book was most important to you, (2) were you persuaded by Mukherjee’s argument on that issue and (3) what reasons might exist to be skeptical about Mukherjee’s argument? Submit the essay to the Moodle Q & A site and, in addition, comment on at least one other student’s essay.

Wednesday, Feb 14

Continued discussion of The Gene

Optional Readings: Available on Moodle

Module 3

Themes: water availability, water quality, interaction with food and energy issues

Wednesday, Feb 21

Required Readings: The Ripple Effect by Alex Prud’homme

Assignment: Write an essay of no more than 500 words evaluating the author’s main argument with specific attention to points of agreement or disagreement between her views and yours; submit to Moodle Q & A forum. In addition, submit a substantive comment on at least one other student’s essay.

Wednesday Feb 28

Continued Discussion of The Ripple Effect

Mid-Term Synthesis

Wednesday, March 7

Required Readings: To be posted
**Synthesizing the first half—**

**Assignment:** Write an opinion essay of no more than 800 words expressing your view on a topic that spans more than one of the first three books and making a case for some action by a responsible party that can be influenced by your readers. Due March 9, 2018 at 11:55 pm.

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**Wednesday, March 14**

**SPRING BREAK**

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**Module 4**

**Themes:** climate change and public policy, economics of climate change and solutions

**Wednesday, March 21**

**Group 4 to lead discussion**

**Required Readings:**

*This Changes Everything: Capitalism vs The Climate* by Naomi Klein

Assignment: Write an essay of no more than 500 words evaluating the recommendation made in the book that you think is most likely to be adopted and explain why. Submit the essay to the Moodle Q & A forum and, in addition, comment on at least one other student’s essay.

**Wednesday, March 28**

Continued discussion of *This Changes Everything*

**Optional Readings:**
Available on Moodle

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**Module 5**

**Themes:** automation, artificial intelligence, technology choices

**Wednesday, Apr 4**

**Group 5 to lead discussion**

**Required Readings:**

*Machines of Loving Grace* by John Markoff

Assignment: From your assigned book, evaluate the most significant observation or assertion the author makes and explain how it might make a difference in the implementation of a science, technology or environmental policy; submit to Moodle Q & A forum, 500 words maximum. In addition, comment on the essay of a student who read a different book.

**Wednesday, Apr 11**

Continued discussion of *Machines of Loving Grace*

**Optional Readings:**
Available on Moodle
Module 6

Themes: food, food justice, environmental impacts of agriculture

Wednesday, Apr 18  

Group 6 to lead discussion

Required Readings:
*The End of Plenty: The Race to Feed a Crowded World* by Joel K. Bourne, Jr.

Wednesday, Apr 25  

Continued discussion of *The End of Plenty*

Optional Readings:  
Posted to Moodle

Wednesday, May 2 Last class

Synthesizing the course

Assignment: Final paper (opinion essay or mini-brief) Due May 9, 2018 at 11:55 pm.