PA 5715 Syllabus
Survey of Current Topics in Science, Technology and Environmental Policy
Spring 2016

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OFFICE HOURS
Thursdays 10 am – 12 noon (except Jan. 21)

The objective of this course is to explore current topics at the interface of science, technology and public policy. Specific learning objectives for students include gaining an understanding of current “hot” topics in science, technology and environmental policy; developing critical thinking skills; developing oral presentation and discussion skills; and understanding 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 there will be significant student participation, including students conducting discussion.

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 students will be asked to read in its entirety by the first session of the module. Students will be assigned to groups and asked to lead the discussion in the first session of each module. Students will 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.

Other books we are likely to read are:
Captive Audience by Susan Crawford
Cities – We have used these three books recently: *The Triumph of the City* by Edward Glaeser, *The Metropolitan Revolution* by Bruce Katz and Jennifer Bradley and *A Country of Cities: A Manifesto for an Urban America* by Vishaan Chakrabarti

Sixth book to be determined

**GOALS**

- Gain an understanding of current “hot” topics in science, technology and environmental policy;
- Develop critical thinking skills;
- Develop oral presentation and discussion 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 Sunday before we are first scheduled to discuss each book. The comments on other students’ essays should be posted by 5 pm on Monday, the next day. The goal is to have them available to me and other students before we begin discussing the book in class. 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

Thursday, Jan 21
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

Thursday, Jan 28
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.

Thursday, Feb 4
Continued discussion of Righteous Mind

Optional Readings:
Module 2

Themes: environmental contamination and other conditions and effects on humans; toxic chemical management and policy

Thursday, Feb 11

Group 2 to lead discussion

Required Readings:
More Than Genes: What Science Can Tell Us About Toxic Chemicals, Development, and the Risk to Our Children by Dan Agin

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 Agin’s argument on that issue and (3) what reasons might exist to be skeptical about Agin’s argument? Submit the essay to the Moodle Q & A site and, in addition, comment on at least one other student’s essay.

Tuesday, Feb 18

Continued discussion of More Than Genes

Optional Readings:
Available on Moodle

Module 3

Themes: tbd

Thursday, Feb 25

Group 3 to lead discussion

Required Readings:

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.

Thursday March 3

Mid-Term Synthesis

Thursday, March 10

Required Readings:

**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 11, 2016 at 11:55 pm.

Thursday, March 17

Module 4

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

Thursday, March 24

Group 4 to lead discussion

Required Readings:
The Climate Casino: Risk, Uncertainty, and Economics for a Warming World by William Nordhaus

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.


Thursday, March 31

Continued discussion of Climate Casino

Module 5

Optional Readings:
Available on Moodle

Themes: the environmental effect of cities, city or metropolitan governance and science, technology and environmental policy issues

Thursday, Apr 7

Group 5 to lead discussion

Required Readings:
The Triumph of the City by Edward Glaeser, The Metropolitan Revolution by Bruce Katz and Jennifer Bradley and A Country of Cities: A Manifesto for an Urban America by Vishaan Chakrabarti

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.
Thursday, Apr 14

Optional Readings:
Available on Moodle

Module 6

Themes: tbd
Thursday, Apr 21

Required Readings:
TBD

Thursday, Apr 28

Optional Readings:

Thursday, May 5 Last class

Synthesizing the course

Assignment: Final paper (opinion essay or mini-brief) Due May 11, 2016 at 11:55 pm.