Government 429 Syllabus
Senior Research and Writing Seminar

Politics of Science: Contentious Knowledge and Social Movements

Professor Ronald Herring
T 2:00-4:25; ISS conference room Hughes Hall 146 [SEE NOTE] ¹
Office Hrs: T 11-12; W 1:45-3:30 and by appointment.
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Course Description:

This course is a research seminar in which students – typically individually, but perhaps some in clusters -- will write research papers on some manageable puzzle in the politics of science. We will look at scientific controversies and their political representation broadly, but with some collective focus. As all students will be working on different topics, we will provide some common points of reference by consideration of the genomics revolution that has altered medicine and food systems globally. Genetic engineering has generated a global controversy over transgenic organisms: “GMOs” in popular parlance. We use this window to ask: How do societies deal with collective uncertainty and risk? How do social movements respond to niches in contentious knowledge to expand their power and influence?

Science claims for itself only to be a method of judging truth claims through transparent and replicable testing of theory-driven hypotheses in a community of people with similar commitments. Yet recent disputes have illustrated how easily, perhaps inevitably, science becomes engangled in politics – consider controversies concerning global warming, evolution in the schools, fluoridation of water supplies, nuclear power safety, European rejection of “Frankenfoods.” In political conflicts around specific policy issues we find theological ("creation science" or "Vedic science") and civilizational ("Western science" “imperialist science”) or simply instrumental (“corporate science” “partisan science”) characterizations politically activated by specific groups in society. To what extent is real science politically crippled by its own commitment to incremental evidence-based knowledge in the face of junk science?

Unless otherwise noted, as in a URL in text, required readings will be posted on the course Blackboard.

Texts Available for Purchase

Chris Mooney, The Republican War on Science Basic Books 2005 isbn 0-465-04675-4

¹ Hughes Hall is connected to Myron Taylor -- the Cornell Law School. If you do not know where these buildings are please refer to the following map link (http://www.cornell.edu/img/maps/large_search.pdf). Use the search feature and request the location of Hughes Hall. Proceed toward Institute for the Social Sciences once inside the building.


Mark L. Winston *Travels in the Genetically Modified Zone* Harvard U Press 2002

**Optional Books Available for Purchase Locally (Campus Store)**


**Course Requirements:**

Evaluation: Research Design Proposal 10%

Research Design 15%

Oral Presentations and [Informed] Participation 20 %

Research Paper 55%

1) Paper Proposal: **Due October 15**

In this assignment, you should clearly spell out:

**The Puzzle:** situate your research. What is known, what is unknown, what is disputed? Why is it important?

**Prelude to a Research Design:** What is your method? [comparative cases? critical case study? cross-sectional data analysis? Anecdotal hearsay?]

**Sources of Evidence:** What evidence might settle the puzzle you have chosen? [eg parliamentary debates? microdata on profits? reports of NGOs? Resolution of disputes in the science?] Is such evidence available in a short term? Do will you do if it is not? What will be hard to find out, and what is your strategy for finding out?

**Anticipatory Conclusion:** What can you expect to demonstrate? Under what conditions does your conclusion hold, given limitations of research design?

2) Presentation of Research Design **October 23**

Tell the class very succinctly **what** you plan to do, **why** it is important, and **how** you will do it.

3) The Paper its Own Self **Due December 6 No Incompletes**

**Course Schedule:**
Week of Aug 28: **Introductory Course Overview**


The rejection of HIV/Aids science places the question of authoritative knowledge at the center of controversies with real consequences. We read Latour to introduce the dilemma: modernity replaced systems of authoritative knowledge with faith in science, only to find that science itself is socially embedded, and therefore incapable of pure epistemological autonomy. Social studies of science emphasized this embeddedness of science in social processes. But surely there are limits; holocaust deniers, HIV/Aids deniers, 9-11 deniers, and the explosion of junk science globally raised doubts about the rush to relativism. Latour theorizes what has been wrong with theorization.

Week of September 4: **Partisan Science**

Read: Chris Mooney, *The Republican War on Science*, entire


**Note:** Chris Mooney will be on campus for a discussion of science and politics in a public forum October 20, Thursday, 4-6 PM. Kurt Gottfried will be part of the panel discussion.

Class Discussion: Does Mooney’s account imply that science is inherently political, though to different degrees depending on partisan control of instruments of government? How would you evaluate his argument that the Bush administration is exceptional in its instrumental use of science to partisan ends? If so, why would that be so? If untrue, what is wrong with Mooney’s measures or argument?

Week of Sept 11: **Political Science**


Philosophy…”


The existence of partisan science is easy to understand: a party that favors laissez-faire policies toward business is unlikely to pursue data on threats to worker health or externalities from business activity; parties that distrust business are more likely to allocate monies for studies of business externalities [eg pollution]. But what is the sense in which the insertion of science into social life is inherently political? Can there be science free of who gets what and how?

Part II:

*Common Ground Case Study: The Global Politics of Genetic Engineering*

Week of September 18 *Promethean Perspectives*

Read: Jonathan Rauch, Will Frankenfoods Save the Planet? The Atlantic, October 2003, [http://www.jonathanrauch.com/jrauch_articles/will_frankenfood_save_the_planet/index.html](http://www.jonathanrauch.com/jrauch_articles/will_frankenfood_save_the_planet/index.html)


If terminology is opaque, see the helpful guide from UCS: [http://www.ucsusa.org/food_and_environment/genetic_engineering/what-is-genetic-engineering.html](http://www.ucsusa.org/food_and_environment/genetic_engineering/what-is-genetic-engineering.html)

If text seems unclear or incomplete, see the exceptionally clear interview with Martina Mcgloughlin: [http://www.pbs.org/wgbh/harvest/interviews/mcgloughlin.html](http://www.pbs.org/wgbh/harvest/interviews/mcgloughlin.html).

*Optional Readings:*


On “Biotech Food Myths,” see


**Week of September 25: Knowledge Insurgencies: Pandora’s Box**

Read: Vandana Shiva *Biopiracy*, entire

For a more elaborated `and complete view, see the debates on


and http://www.agbioforum.org/v2n34/v2n34a04-mcgloughlin.htm

and http://www.agbioforum.org/v2n34/v2n34a14-altieri.htm


For Senate testimony on biotechnology and poverty/hunger globally, see

http://www.biotech-info.net/beachy_testimony.html and in the editorial of the NYT, see

Genetically Modified Food and the Poor New York Times Editorial October 13, 2003

http://www.nytimes.com/

*Optional Recommended Readings:*


**Week of October 2 Authoritative Science, Official Science: Regulation and Risk**

Read: Mark Winston, *Travels…* pp 35-258

*Optional Reading: Mary Douglas and Aaron Wildavsky, *Risk and Culture*

Guha, *Environmentalism*, entire; pay special attention to Ch 6


The very existence of new knowledge in the species implies the possible nexus of a dispute around safety, utility, threat; Ned Ludd was not alone. Regulation presupposes, and establishes, authoritative science, or expertise. In realms of unsettled knowledge, such as genetic engineering, such institutions of expertise will be sites of contestation. The Cartagena Protocol establishes this political arena.

Week of October 9: Fall Break no classes

Week of October 16: Social Movement Politics and Science: Asymmetric Knowledge
Read: “Big People on Campus,” New York Times, November 26, 2006 [click “print” from Blackboard site]

Optional Readings:
Nancy Lee Peluso and Michael Watts eds Violent Environments Cornell Univ Press 2001 isbn 0-8014-8711-0
Doug McAdam, Sidney Tarrow, Charles Tilly Comparative Perspectives on Contentious Politics, Chapter for revised edition of Mark Lichbach and Alan Zuckerman (eds.), Comparative Politics: Rationality, Culture, and Structure:Advancing Theory in Comparative Politics. Cambridge: Cambridge University Press, in press.

Week of October 23 Oral Presentations, First Round

Note: after research topics are set, and collaborations, if any, decided, readings for remaining classes will be more tailored to interests. Suggestions below are only suggestions, based on what I think at this point in the term might be useful avenues to pursue. I will present prepared remarks to connect these topics to the research papers under construction.

Part III

November 6-27 Contextualizing Themes

Class discussion will be focused around themes emerging from student research. Below are some of the topics that will be covered in lecture.

“Imperialist Science?” GMO/WTO/NGO


**Ethics, Science and Knowledge Claims**


**Political Ecology**


December 6: **Papers Due. No Incompletes**

**Additional Useful Texts**

Michael Goldman, ed., *Privatizing Nature: Political Struggles for the Global Commons*


Robert L. Paarlberg, *The Politics of Precaution: Genetically Modified Corps in Developing Countries*.

Mary Douglas and Aaron Wildavsky, *Risk and Culture*. University of California 1982

Michael Pollan, *The Omnivore's Dilemma: A Natural History of Four Meals* Penguin. 2006


And Sites

http://www.ucsusa.org/
http://www.junkscience.com/
http://www.gmwwatch.org/p1temp.asp?pid=1&page=1
http://www.agbioworld.org/
http://www.isaaa.org/
http://www.indsp.org/index.php
http://biodevelopments.org/ip/index.htm

And Tips

You might try a Google Alert for your precise topic: it will notify you by email when there is new information on the web.