Science and Politics

This seminar will examine science and politics from early modernity to the present and consider the probable course and character of that relationship in the foreseeable future. Topics to be considered will include Galileo's conflict with the Church, the theory of evolution, Social Darwinism, and the origins and consequences of the Manhattan Project. We also will examine a number of contemporary controversies in the politics of science, including intelligence testing, the AIDS epidemic, climate change, genetic engineering, and the issue of whether the scientific method can be applied to all areas of knowledge. The proper role of scientists in influencing politics and shaping policy also will be examined.

Requirements: Since this is a seminar, regular and active participation in class discussions is essential. You will also be expected to help extend those discussions through a variety of short writing assignments. Such assignments will include the following: first, a carefully designed study question (a short paragraph in length is usual) on every week’s reading, emailed to me each Wednesday by 9 p.m.; and secondly, two relatively short (1500 word) papers (also due by 9 p.m. on Weds), designed to help facilitate class discussion. Finally, you will be required to write and present a long (20+ page) research paper on a topic related to the material covered in the course. First, however, you must write a proposal (with annotated bibliography) that clearly indicates your paper’s topic, major focus, and research methods. Proposals will be due in my office on Friday, October 14, and your paper topics must be approved before you can proceed.

Reading: Note that there is a lot of reading for this course. Budget your time accordingly, particularly during those weeks with uncommonly heavy reading loads or those where a substantial proportion of the readings are on reserve or e-reserve. And please be sure to bring the readings to class.

Grading:  

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<tr>
<th>Component</th>
<th>Percentage</th>
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<tr>
<td>Short papers</td>
<td>20%</td>
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<tr>
<td>Discussion questions</td>
<td>10%</td>
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<td>Paper proposal and bibliography</td>
<td>10%</td>
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<tr>
<td>Research paper and presentation</td>
<td>40%</td>
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<td>Participation</td>
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<td><strong>Total</strong></td>
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Academic Honesty: Should you be unclear about the College's policies on academic honesty, please review them (in the College Catalogue, pp. 24-27). Plagiarism in particular is a serious offense which will result in failing the course or worse. If in doubt about the rules, please don't hesitate to ask. I strongly encourage you to discuss the readings with others, but all written work must be entirely your own.

Disabilities: If you have a physical, psychological, medical or learning disability that may affect your ability to carry out assigned course work, I urge you to contact the Office of Disability Services at PBX5453. The Coordinator of Disability Services, Erin Salva, (salvae@kenyon.edu) will review your concerns and determine, with you, what accommodations are appropriate.

Contacting me: My office is located at O'Connor 107 (PBX: 5638), and you can also contact me via phone (PBX 5638) or e-mail (vanholde@kenyon.edu). I am always happy to discuss readings, papers, and issues we have raised in class. My office hours this term are Tuesday 10-12, Weds 10-11, and Fri 10-
12, or by appointment. Please don’t hesitate to stop by.

**Books to Purchase:**
Philip Appleman
Bertolt Brecht
Joel Garreau
Stephen J. Gould
Ramez Naam
Stephanie Nolen
Naomi Oreskes and Erik Conway
Richard Rhodes

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**Course Outline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Material</th>
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<tr>
<td>8-25</td>
<td>Science, Politics, and Belief: the case of Galileo</td>
<td>Read: Bertolt Brecht, <em>Galileo</em> (the play only, not intro or appendices)</td>
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<td>90</td>
<td>Issues: Galileo as scientist and political actor</td>
<td>Nature of the scientific method</td>
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<td>Possible reasons for censorship</td>
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<td>The nature of evidence and the limits of paradigms</td>
<td>The authority of scientific belief</td>
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<td>Science and social stereotypes</td>
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<td>Objectivity and subjectivity in science</td>
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<td>9-15</td>
<td>(Mis?)measuring Ourselves</td>
<td>Discussion papers:</td>
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<td>185</td>
<td>Read: Herrnstein and Murray, <em>The Bell Curve</em>, selections (e-res)</td>
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<td>“The Issue” (articles from <em>New Republic</em> on intelligence/race controversy (e-res)</td>
<td>Issues: Debates about intelligence and race</td>
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<td>Are there limits to Darwinian models?</td>
<td>Should some research be controlled or forbidden?</td>
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Discussion papers:

9-22  The Manhattan Project
260+
Read: Richard Rhodes, *The Making of the Atomic Bomb* -- as much as you can, and *at least*: pp.13-36, 78-81, 86-103, 118-128, 168-197, 279-325, 389-393, 443-560
Issues: Scientific research and political allegiance
Possible tensions between pure and applied science
Security and secrecy

Discussion papers:

9-29  From Trinity to Hiroshima
225
View by this date: “The Day After Trinity.” Public showing TBA.
Issues: Scientists as political advocates
Ethical dilemmas surrounding the use of nuclear weapons
Possibilities of a post-nuclear world

Discussion papers:

10-03  Paper proposals due in my office by 5 p.m.

10-06  Fall Break -- No Class. Start reading 28: *Stories of AIDS in Africa*.

10-13  AIDS: The Science and Politics of an Epidemic
250
Read: Nancy McKenzie, *AIDS Reader*, pp. 1-16, 107-143, 190-199 (on course reserve)
View by this date: “And the Band Played On” (2 hour film). Public showing TBA.
Issues: Biological, social, and political aspects of AIDS
Stigma and the “normalization” of AIDS
AIDS in the developed and developing worlds

Discussion papers:

10-20  AIDS: From Epidemic to Pandemic
240
Tony Barnett and Alan Whiteside, *AIDS in the 21st Century*, pp. 3-26, 139-168,
374-390 (on class page)
Issues: The “value of life” in the developed and developing world
AIDS prevalence in Africa: scientific fact or racist prejudice?
The scientific and political future of AIDS

Discussion papers:

10-27  Hired Guns? Science, Politics, and Economic Interests
190
Issues: Interests, objectivity, and science
The proper relationship of science, politics and policy
Ethical issues relative to sponsored research

Discussion papers:
11-03  The Climate Change Debates
185  
Read:  Oreskes and Conway, *Merchants*, Chapters 6-7, “Conclusion” and “Epilogue.”
William Collins *et. al.*, “The Physical Science Behind Climate Change.” *(e-res)*
Dessler & Parson, *Science and Politics of Global Climate Change*, ch. 5. *(e-res)*
Additional reading to be assigned

Issues:  Is radical climate change imminent?
Principles for conducting or restricting research and technological development
Science, politics, and funding

Discussion papers:

11-10  Implications of the New Biology – I
215  
Read:  Margaret Talbot, “A Desire to Duplicate.” At class page.
Robert Weir, *Genes and Human Self-Knowledge*, pp. 3-17 (course reserve)
Ramez Naam, *More than Human*, chapters 1-8

View by this date:  “GATTACA.” Public showing TBA.

Issues:  Identification of “abnormal” individuals and/or genes
Questions of confidentiality, privacy, and screening
“Designer babies” and eugenics

Discussion papers:

11-17  The New Biology and Beyond
180  
Read:  Naam, *More than Human*, chapters 9-11
Francis Fukuyama, *Our Posthuman Future*, selections
Joel Garreau, *Radical Evolution*, chapters 1-2
Additional reading to be assigned.

Issues:  Ethical and political implications of the new genetics
The possibilities of a posthuman future

Discussion papers:

11-19  Thanksgiving Break. Finish *Radical Evolution*!

12-01  Toward What Sort of Future?
325  
Read:  Joel Garreau, *Radical Evolution*, chapters 3-8
“Responses to Joy”, 1 and 2. At class page.
William Gibson, *Neuromancer*. Selections to be assigned.
Additional reading may be assigned.

Issues:  Human nature, past, present, and future
Future scenarios, utopias, and dystopias.

Discussion papers:

12-08  Research Presentations and Course Conclusion

12-15  Research Papers due in my office by midnight.