

Science, Values, and Democracy

Draft Syllabus

Professor Matthew J. Brown

Course Description

Many scientists and philosophers defend the value-free ideal of science, and many social and political institutions are based on that ideal. The value-free ideal includes the following cluster of ideas: science is neutral with respect to our values, ideologies, politics, and morals. Except for some restrictions on the ethics of research where humans and other animals are affected directly or indirectly, there ought to be no political or ethical restrictions on science. The application of science is not part of science proper, but rather part of technology, and only the latter is responsible for those applications. Strictly speaking, science has no impact on our values, either, though religious or moral frameworks which presuppose beliefs about the world in conflict with science must give way. And so on.

In this course, we will analyze in depth the value-free ideal and a host of challenges to that ideal. We will look at arguments that values (cognitive, social, ethical) play a role in different parts of the scientific process. We will also examine claims that science does or should transform our values. We will look at questions about the relation between science and use, especially use in policy, and how political and evaluative considerations come in to the use of scientific evidence in policy. Not only do scientific results regularly shape policy, but scientific funding decisions and legal regimes are shaped by political and social institutions, and we will look at the ways in which political (social, economic, etc.) institutions can and should alter or limit science.

Books

Required

- Heather Douglas, *Science, Policy, and the Value-Free Ideal*

- The Challenge of the Social and the Pressure of Practice: Science and Values Revisited
- Mark B. Brown, Science in Democracy: Expertise, Institutions, and Representation
- Kitcher, Science in a Democratic Society
- Kim Stanley Robinson, Fifty Degrees Below
- Paul Feyerabend, The Tyranny of Science

Readings *not* on this list will be available via electronic course materials. Instructions will be sent by email before first day of classes.

Recommended

I've put in an order at the bookstores for the following texts which may provide introductory material or material for further research. None is necessary for the course, though each is helpful for different topics.

Introductory to philosophy of science and STS

- Peter Godfrey-Smith, Theory and Reality
- Frederick Grinnell, Everyday Practice of Science
- Steve Fuller, The philosophy of science and technology studies

Collections of essays

- Keller and Longino, Feminism and Science
- Value-Free Science? Ideals and Illusions
- Science, Values, and Objectivity
- Democratization of expertise? Exploring novel forms of scientific advice in political decision-making

Monographs related to the course

- Janet Kourany, Philosophy of Science after Feminism
- Philip Kitcher, Science, Truth, and Democracy
- Helen Longino, The Fate of Knowledge

- Sheila Jasanoff, The fifth branch: science advisers as policymakers
- Sam Harris, The Moral Landscape: How Science Can Determine Human Values

The other books in Kim Stanley Robinson's *Science in the Capital* series

- Kim Stanley Robinson, Forty Signs of Rain
- Kim Stanley Robinson, Sixty Days and Counting

Tentative Schedule

1. 8/24 - Introduction to Philosophy of Science and Science and Technology Studies
2. 8/31 - The History of Science, Values, and Democracy in the U.S.
 - Douglas, Ch. 1–3 [65pp]
3. 9/7 - Values in Science I
 - Douglas, Ch. 4–6 [67pp.]
4. 9/14 - Values in Science II
 - CSPP 1,3,4, Kourany Ch. 5 [97pp]
5. 9/21 - The Political Theory of Science in Democracy
 - Chapters from *Science in Democracy* [~70pp]
 - Guest Lecture by Mark B. Brown at Center for Values
 - Jonsson Performance Hall
 - Lunchtime meeting on 9/21
6. 9/28 - Feminism and Science
 - F&S Intro,2,3,5 [58pp]
7. 10/5 - Aging Well: Scientific and Humanistic Approaches to Longevity
 - Attend discussion forum in lieu of class
 - Eugene McDermott Library room 2.410
8. 10/12 - Science, Values, and the Policy Process
 - Douglas Ch. 7–8, Epilogue [46pp]
 - No class

9. 10/19 - Science in Democracy and Democracy in Science
 - TBA [< 100 p]
10. 10/16 - Science in a Democratic Society I
 - Kitcher part I [~ 150 pp]
11. 11/2 - Science in a Democratic Society II
 - Kitcher part II [~ 150 pp]
12. 11/9 - The Commercialization of Science
 - CSPP 9–11 [67pp]
13. 11/16 - Science in the Capital
 - 50deg [603pp - but Mass Market Paperback]
 - Guest Lecture by Kim Stanley Robinson at Center for Values
 - Jonsson Performance Hall
 - Lunchtime meeting on Thurs. 11/17
14. 11/23 - A Post-Modern Approach
 - Tyranny [134pp - but light]
15. 11/30 - Science, Democracy, and Religion
 - Kitcher, Kidd, Feyerabend, Farris [~ 50 pp]

Graded Assignments

1. Class participation and preparedness
2. In-class presentation
3. Short response papers
4. Term paper, 10–12 pages
5. Participation in Center for Values in Medicine, Science, and Technology's special events connected to the theme of the course.