Physical details:                      Instructors
Location: TBA                           Prof: Helen Longino
                                             Bldg. 90, 92J
Lecture: MW: 9:30-10:45                  Office Hours: TBA
Discussion: Friday: 10:00-10:50          TA: TBA

Course description:
This course introduces students to some questions philosophers have raised about the nature of scientific knowledge. What distinguishes science from other sources of belief? What are the distinctive cognitive activities of science? What makes them reliable? What can the sciences tell us about the world? Are there limits to scientific understanding? What is scientific objectivity? How is scientific inquiry related to human and social values?

In learning to think philosophically about these and other issues we will engage with philosophical as well as with scientific writing. Students will encounter the work of some of the principal recent and contemporary philosophers of science, including Bas van Fraassen, Thomas Kuhn, and Philip Kitcher.

You will acquire tools, such as argument analysis and assumption detection, for the evaluation of philosophical claims about the sciences, and, one hopes, develop your abilities to raise philosophical questions of your own about particular scientific claims or about scientific inquiry in general.

We live with the results of scientific investigation every day, in the tools we use and in what we believe and expect about the world. This course should help you better evaluate competing claims about scientific findings and engage in debate about the proper role of science in contemporary life.

Class format:
There will be two lecture/discussion meetings and one additional discussion section per week. The Monday and Wednesday meetings will consist of explanations by and discussion with Professor Longino of the principal issues raised by the week’s assigned readings or in exercises performed by the class participants. The Friday meeting will be an opportunity for further exploration of questions encountered earlier in the week or of additional related issues.

Expectations:
Students will be expected to have read the week's assigned readings at least once prior to their discussion in class and to have questions about them. From week 4 on, there are two main topics in the week. We will address the first on Monday and the second on Wednesday.

There will be a midterm and a final examination and occasional pop quizzes.
In addition, students will keep a weekly journal. They will select one of the controversies in a list to be distributed and do some background reading on the issues. The journal will consist of reflections on how the week’s philosophical questions would apply to the controversy.

Final grade computation: 25% each midterm and journal; 35% final examination; 15% attendance and participation.

Texts:

*Philosophy of Science: A Very Short Introduction* [*Intro* in the schedule below], by Samir Okasha (at the Stanford Bookstore) and readings accessible via Coursework. Chapters from *Intro* will provide an overview of the topic; the readings will explore aspects of the topic more deeply and advocate for specific positions.