Philosophy 353: Introduction to Philosophy of Science

Fall, 2014

TuTh 4-5:15 Bartlett 206 Instructor: Phillip Bricker Office: 370 Bartlett Hall

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Course website: blogs.umass.edu/bricker/teaching/phil-353-introduction-to-philosophy-

of-science

Office Hours: Thursday 2-3, and by appointment

Course Prerequisites. None.

Course Requirements. A take-home midterm exam and a take-home final exam, each worth 30% of the grade. Four two-page writing assignments on the readings, each worth 10%. Class participation can boost your grade up to one step (e.g., from a B to a B+, or an A- to an A).

Readings. The only required book is *Theory and Reality*, by Peter Godfrey-Smith. It should be at the UMass book store. It is available new from Amazon for \$24.44. All other readings will be put on my course website, whose address is above. The readings are password protected and the password is: phiscie.

Course Description and Schedule. The exact schedule is not set in advance. For the first 8-10 weeks, we will work through the first 10 chapters of the text, *Theory and* Reality, complemented by readings from the philosophers being discussed. This is a historically oriented tour of the approaches that philosophers have taken towards science over the past hundred years. It begins with logical positivism and its evolution into a less strict empiricism. It continues with the turn towards the history and the sociology of science taken by Kuhn and Lakatos. It concludes with a brief look at feminist and post-modernist critiques of science ("the science wars") of the past twenty years. Throughout we will be asking: How does science work? Is science the best way to discover the true nature of reality?

For the last 3-5 weeks, we will apply what we have learned to topics of contemporary interest. These may include, depending on class interest: psychology and paranormal experience; evolution and intelligent design; holistic medical practices (acupuncture, homeopathy, etc.); junk science in the courtroom; or climate science.

Plagiarism. The UMass Amherst Academic Regulations defines plagiarism as follows: "Knowingly representing the words or ideas of another as one's own work in any academic exercise." All cases of plagiarism will be reported to the academic honesty office. The penalty for plagiarism ranges from a zero on the assignment involved (in less severe cases) to an F for the course (in the most severe cases). All students are expected to be aware of the University policies on plagiarism and academic dishonesty.