Philosophy of Science

Phil 360A · Prof. J. Dunn

Spring 2012 Tu,Th 7:00 - 8:30 Asbury Hall 110 DePauw University Office:210 AsburyOffice Hours:M,W 3-4 pm; Th 9:30-11:30 am; by appt.Email:jeffreydunn@depauw.eduHomepage:http://acad.depauw.edu/jeffreydunn_web

Description

Science has been extremely successful and holds an important place in our society. But what *is* science? Perhaps it is a method, a set of theories, or a group of people. And what does science give us? Perhaps it gives us a true picture of the world, perhaps merely a useful set of theories, or maybe it just gives us one way of looking at the world among others. Finally, how does science fit in with other enterprises like politics or religion? Perhaps it should guide these other enterprises, or perhaps it should be subservient to them. Given the important place that science occupies, these questions are critically important. In this course we'll try to address them. We'll start with an overview of some classic topics in philosophy of science, including the problem of induction, Logical Positivism, and the demarcation problem. After that we'll work through Thomas Kuhn's *Structure of Scientific Revolutions*. We'll finish off the course by reading most of Philip Kitcher's *Science, Truth, and Democracy*. This course will focus mainly on primary sources in philosophy of science. As a result, it will be challenging, but also rewarding.

Books

- ▶ Theory and Reality, Peter Godfrey-Smith, Univ. of Chicago Press.
- ▶ The Structure of Scientific Revolutions, Thomas Kuhn, Univ. of Chicago Press.
- ▶ Science, Truth, and Democracy, Philip Kitcher, Oxford Univ. Press.

(The books above are available at the University Bookstore.)

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Other materials will be made available to you online through Moodle.

Grading

Participation	5%
Short Paper:	5%
Demarcation Papers (3):	15%~(3%/5%/7%)
Midterm Take-Home Exam:	20%
Final Paper Presentation:	5%
Final Paper:	20%
Final Exam:	30%

Course Requirements

Participation

One of the best and most engaging ways to learn philosophy is to participate in careful, informed discussion about the material being read. This class will center on such discussion and you are expected to be an active participant each day in class. For such discussions to be profitable, they must be *informed*. This means that you are also expected to have *carefully* and *thoughtfully* have completed the reading for each class. A schedule of the reading assignments is available online. I will assess this aspect of your participation based on your engagement during class, your engagement outside of class, and your attendance.

Writing Assignments

Short Paper

The short paper assignment is a writing assignment where you will be asked to write a clear and careful response to one of the readings in class. Since it comes early in the semester, it will give you an early chance to assess your progress in the course. Specific information about this paper will provided when it is assigned.

Short Paper Due: Feb. 14 (Happy Valentine's Day!)

Demarcation Papers

Philosophy is all about fostering real debate between opposing viewpoints. For this assignment you will write a series of three papers on the same topic and respond to the viewpoints of your classmates.

The first paper will be a short piece (200-400 words) responding to a prompt about the *demarcation* problem.

I will look through these first papers, select 3-5 as *exhibits* and then post them to Moodle. Your second paper will be a slightly longer piece (800-1,000 words), which builds on your first paper and also responds in some way to one of the exhibits.

I will then look through this second batch of papers, select 3-5 as *new exhibits* and then post them to Moodle. Your third, and final paper (1,200-1,800 words), will build on your previous papers, and respond in some way to the new exhibits.

First Paper Due: Feb. 21Second Paper Due: Feb. 28Third Paper Due: Mar. 8

Final Paper

Your final paper for this course will be an argumentative paper on a topic of your choosing. It should be approximately a 2,500-3,000 words. There are three main parts to this assignment:

- 1. Give a 5-minute presentation to the class, explaining your thesis, main arguments, and sources. Then respond to questions from the class. Apr. 17 & 19.
- 2. Compose a rough draft of your paper and submit it to me for comments. Apr. 27.
- 3. Revise your paper in light of comments and submit the final draft. May 15.

To give you an idea of what is expected, below are two examples of the kind of structure that would be appropriate for your paper. (For more detailed information about the paper, please see the document posted on the course website.)

Example 1:

- 1. Present a view discussed in class.
- 2. Present an objection to that view.
- 3. Consider possible replies to the objection.
- 4. Evaluate the replies and offer an assessment.

Example 2:

- 1. Present a key argument from a paper that you selected in the area of your topic.
- 2. Explain this argument, defining all technical terms, and providing the best possible reasons in favor of each premise of the argument.
- 3. Evaluate the argument, explaining how someone could criticize it.

* I strongly recommend that you take advantage of the Writing Center in the Academic Resource Center, located in 115 Asbury. After scheduling an appointment, you will have the chance to meet with a trained tutor who will read your work and offer feedback. This is a great way to improve your writing, however, slots can fill up quickly, so please plan ahead and take advantage of this great resource.

Exams

Midterm Exam

The midterm exam for this course is a take-home exam. Any material in the course readings or in the class discussions is fair game. It will be assigned on **April 3** and is due on **April 5**.

Final Exam

The final exam for this course is *not* a take-home exam. It will be taken during the final exam period. It is a cumulative exam. Any material in the course readings, student presentations, or in the class discussions is fair game. It will be on May 14, 6:00 - 9:00 pm.

Other Requirements

You should take control of your experience in this course: what you get out of the course will largely be a function of what you put in to it. If you are falling behind or are confused about something, please make arrangements to meet with me. I really like the material we're covering in this course, and I'm on campus every day. So come talk to me about it!

Things You Can Expect From Me

I will give clear and prompt feedback on your work.

I will assist you in choosing a paper topic, finding outside sources, and editing your paper.

I will be available to discuss the material outside of class, whether over email, during office hours, or at other times.

Special Considerations

DePauw University is committed to providing equal access to academic programs and university-administered activities and reasonable modifications/accommodations to students with disabilities in compliance with the Americans with Disabilities Act (ADA) of 1990, as amended in 2008. Any student needing special accommodations due to a disability should contact the Coordinator of Student Disability Services, Pam Roberts, 302 Harrison Hall or call (765) 658-6267. It is the responsibility of each student to discuss implementation of approved modifications/accommodations with each faculty member and/or staff member within one week of the date of receiving a modification/accommodation approval memo or within the first two weeks of the academic semester.

Academic Integrity

Academic integrity is very important, and violations are serious offenses, which I take very seriously. There is a clear Academic Integrity Policy that can be found here:

http://www.depauw.edu/univ/handbooks/dpuhandbooks.asp?ID=101parentid=100

It is your responsibility to read the university policy. If you are unclear about what constitutes a violation of academic integrity, it is your responsibility to contact me with any questions so that you are clear about it. Ignorance is not an excuse. The *minimum* penalty for violations of Academic Integrity is a 0 on the relevant assignment and a further reduction in your overall grade.