This course is designed to familiarize new Ph.D. students with some fundamentals of the philosophy of science and their implications for political science research. It may also be appropriate for undergraduate seniors (PSC 380) considering graduate study in political science. However, all undergraduate students should see me before proceeding with the course.

We shall use a three-fold approach. We begin with examining some critical basic concepts in the philosophy of science, especially as these apply to social science research. We shall then consider some specific works in several areas of political science, applying general philosophy of science concepts, especially the idea of scientific "progress" to examples of research in these areas. We then turn more explicitly to problems of design and criticism of political science research, considering first the general problem of determining observable implications of social science theory and then the (slightly) more specific problems of sample, measurement and interpretation of evidence. We explore these problems further through consideration of specific works in contemporary political science. Finally, we attempt to apply our concepts at both levels to the construction of an original research design.

Students will be evaluated in terms of their performance in all three aspects. The first assignment and the midterm consider applications of the philosophy of science to the problem of making "progress" in some specific areas of political science. The second assignment considers applications of inference problems to evaluation of specific works in political science. The final assignment combines these in the proposal of an original research design.

We are most likely to make useful sense of these abstract concepts of philosophy and inference if we examine them in the context of political science work that is of personal interest. I have chosen some areas of political science that fit with my interests. I am open to altering one of these to fit more closely with collective interests of the class. I hope also to allow each student to tailor the broad concerns even more closely to his or her personal interests by selecting specific political science articles to critique and individual topics for proposed investigation.

General responsibilities of seminar participants: (1) first assignment 15%; (2) examination 30%; (3) second assignment 15%; (4) research design paper 30%; (5) class participation 10%!
You should not expect to take an incomplete in this course.

**Books to Purchase** (in Bookstore, but I suggest getting used copies from the internet):
Kuhn, *Structure of Scientific Revolution* 1970 (2nd ed) or later.
SYLLABUS - PSC 380/480  fall, 2007

THE CLASS MEETS ON Tuesday 12:30 - 15:15, Harkness 329

<table>
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<tr>
<th>Week</th>
<th>Discussion</th>
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<td>Sept.4</td>
<td>Class organization and introductions.</td>
<td>Syllabus.</td>
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Be prepared to present the contents and to discuss its strengths and weaknesses as political science.  
| Sept.18| Scientific Knowledge and Scientific Progress | Hempel, Philosophy of Natural Science 1966, All, esp. Ch.1-6.  
Kuhn, Structure of Scientific Revolutions, 2nd, 1970, Ch.1-8 |
| Sept.25| Scientific Knowledge and Scientific Progress | Kuhn, Ch. 9-13 & Postscript.  
Clifford Geertz, "Thick Description," Ch. 1 in The Interpretation of Cultures,1973.  
Scott, Weapons of the Weak, 1985, esp. Ch. 1 and 2. |
| Oct. 9| Methods of Explanation | Little, Varieties, Ch. 5-7,9-11.  
Esp. Ch. 6, 7, 11. |

**ALSO TODAY**  
**FIRST ASSIGNMENT DUE:** Consider arguments about progress in and explanation in social and natural sciences applied to your APSR article. Keep in mind at least the two possible viewpoints: Hempel(& Little) v. Geertz (and Scott?) Maximum 5 pages, double spaced, with decent margins.
SYLLABUS - PSC 380/480 Continued Fall, 2007

Bendor & Hammond, "Rethinking Allison's Models" APSR, June 92.
Signorino, APSR, 1999,279-98.


Oct. 30 In-class EXAMINATION: Applying the philosophy of science questions to political science research.

Nov. 6 No class meeting this week.

Nov. 13 Problems of Inference and Causality King, Keohane & Verba, Designing Social Inquiry,1994, Ch. 1-3.

Nov. 20 Is the test prediction true? true? The devilish auxiliary hypotheses of Sample, Measurement, Specification (omitted variable bias, endogeneity) King, Keohane & Verba, Ch. 4-6.
Gerber & Green, “Canvassing” APSR 94 2000:653-663.
Scott, Weapons of Weak, Ch. 8.


Dec. 4 SECOND ASSIGNMENT DUE: Analyze the sample, measure, specification problems in your (or an) APSR article from 1996-07. Five page maximum, etc., as per assignment #1. Be prepared to present and discuss in class.

Dec. 11 Be prepared to discuss your proposed research design project.
Research Design paper Due on Thursday December 13.

The research design paper should be a self-conscious application of course materials. You should choose a topic of personal interest to you. This paper may build on any of your previous work or may be completely new.

In a 10-12 page (double spaced), paper you should do the following: (1). Sketch a research project that involves normal science within political science, and which includes collection of new empirical data. The sketch should indicate the previous research to which it is related, the contribution that it will make, the methods of the study, the types of empirical data to be examined, the mode of analysis, the nature of conclusions anticipated. This section should be 7-8 pages. (2). Provide an analytic critique of your design, indicating its strengths and weaknesses in contributing to progress in political science. This section should be 3-4 pages.

Sources.

The books by Hempel, Kuhn, Little, Scott, Olson, Przeworski, King-Keohane-Verba are available for purchase at the bookstore. It may be less expensive to order them on line. Other articles and chapters will be available in the political science lounge. Please either make your own copy or be sure not to keep these too long, as others will need them.

Note that you are required to choose an article from the American Political Science Review (1996-2007) and discuss it several times with the class. The APSR is available in the library’s electronic journals online; current issues are also in the periodical reading room; older issues are also in the stacks. Several other journal articles are also assigned; you can find them through the library’s electronic journals.

Choice of Example III.

In one of the first class meetings we shall consider whether to substitute another example of empirical political science research for the one currently shown as Example III: economic conditions and democracy. For example, we might consider election rules and party systems, looking at the kind of work introduced in the Riker article in Week 2; political party competition and campaign promises; party identification in American voting behavior; government stability in parliamentary systems; political culture and democratic performance; election rules and (mis)representation in democratic elections. Or.....? I am open to your interests and ideas.