# Philosophy 145/Economics 137: The Philosophy and Methodology of Economics

#### Administrative Details

Instructor: Professor K.D. Hoover

Lecture: 4:25-6:55 PM, Thursday, 202 West Duke Building

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Web Page: <a href="http://www.econ.duke.edu/~kdh9">http://www.econ.duke.edu/~kdh9</a> or access through Blackboard. I will

keep up-to-date information about the course on my website.

Office Hours: 1:30-3:00 PM, Mondays; 9:30-11:00. Thursdays. I am available outside of office hours only by appointment. Arrange an appointment either after

class or by telephone or e-mail.

# **Prerequisites**

One philosophy course and either Economics 105 and 110 or Economics 139; or consent of the instructor.

## Course Description

Economic methodology tries to make sense of what economists do when they investigate the economy. It is closely related to the philosophy of science, which is concerned with how science produces knowledge, explanation, prediction, and understanding. In this course, which will be taught in a seminar format, we will study economic methodology and the philosophy of science with a focus on its applications to economics. We will start with some classic contributions – e.g., those of John Stuart Mill, John Neville Keynes, and Milton Friedman to economic methodology and those of Carl Hempel, Karl Popper, Thomas Kuhn, and Imré Lakatos to the philosophy of science with case studies of their applications to economic problems. We will also consider a variety of recent topics at the intersection of philosophy and economics, such as models, causality, reductionism, and realism.

# Required Work and Grading

There are three required graded parts to the course:

- 1. Weekly short assignments: 30 percent. These assignments are meant to make sure that you are up to speed on, and engaged in, the primary readings. I will give further instructions about content in class. They will be graded on the basis of how seriously informed and engaged in the reading that they show you to be. There is an absolute maximum of 1000 words. Short assignments are due at the beginning of class each week and will not be accepted late. If you have to miss class for anything other than a verifiable emergency, work that is in my mailbox in the Economics Department (213 Social Sciences Building) before I return from class will be counted as on time.
- 2. Class participation: 30 percent. The class will be conducted as a seminar and

- discussion and participation is essential. Students are expected to be prepared to discuss topics and to participate actively.
- 3. *Analytical papers*: 40 percent. There will be four longer analytical papers during the semester. The topics and due dates are listed below. I will provide further details in class

## Academic Ethics

I will hold you to strict standards of academic ethics. I encourage students to discuss economics and the class material together, to help each other in coming to understand the material. Nevertheless, work submitted for a grade must ultimately be the work of the individual student – not copied from another student or from any other source. The weekly assignments are not research papers and, generally, do not rely on secondary sources. However, any direct quotation to should be clearly attributed to its source. The analytical papers are also not research papers in the sense that I expect you to find sources other than those on the reading list. Nevertheless, you very likely will refer to specific passages and arguments in the materials that you use (and it is not impossible that you may refer to secondary sources). All such references to sources other you're your own thoughts require scholarly documentation (i.e. footnotes, bibliography, or other citation forms); quotations must be properly indicated (e.g., by quotation marks) and sources of information and ideas that are beyond the commonplace properly documented. Plagiarism is a serious matter and is totally unacceptable. If you have any doubts about what is appropriate and acceptable, please contact me.

# Readings

All readings are electronically accessible: go to the Readings link on the course website: <a href="http://www.econ.duke.edu/~kdh9/Courses/Phil%20145-Econ%20137/145master.htm">http://www.econ.duke.edu/~kdh9/Courses/Phil%20145-Econ%20137/145master.htm</a>
From there, you can either click on direct links, or download directly from Blackboard or from the E-reserves link available through Blackboard.

## 0. Background

Daniel Hausman, "Economic Methodology in a Nutshell," Journal of Economic Perspectives 3(2), 1989, pp. 115-127.

Daniel Hausman, "Appendix: An Introduction to Philosophy of Science," *The Inexact and Separate Science of Economics*. Cambridge: Cambridge University Press, 1992, pp. 281-329. <u>E-reserves</u> (under "Hausman, Inexact and Separate Science of Economics (Part 2)").

Mark Blaug, Marcel Boumans, John Davis, Harro Maas, and Gert Reuten, "A Short Introduction to the Methodology of Economics," unpublished manuscript, University of Amsterdam. <u>Blackboard.</u>

## 1. Classical Contributions to Economic Methodology

John Stuart Mill, "On the Definition of Political Economy and the Method of Investigation Proper to It," in Essays on Some Unsettled Questions of Political Economy.

John Neville Keynes, *The Scope and Method of Political Economy*, 4<sup>th</sup> edition, 1917. <u>E-reserves</u> (under "Hausman, Philosophy of Economics")

Lionel Robbins, *The Nature and Significance of Economic Science*, 1935. <u>Blackboard.</u> Daniel Hausman, <u>"John Stuart Mill's Philosophy of Economics,"</u> *Philosophy of Science* 48(3), 1981, pp. 363-385.

## 2. Friedman and Positive Economics

Milton Friedman, "The Methodology of Positive Economics," in Friedman, *Essays in Positive Economics*. Chicago: University of Chicago Press, 1953. <u>E-reserves.</u>

Lawrence Boland, "A Critique of Friedman's Critics," Journal of Economic Literature 17(2), 1979, pp. 503-522.

Uskali Mäki, "Friedman and Realism," *Research in the History of Economic Thought and Methodology*, Vol. 10, 1992, pp. 171-195. <u>E-reserves</u> (under "Samuels and Biddle, Research in the History of Economic Thought . . .")

Daniel Hausman "Why Look Under the Hood?" in *Essays on Philosophy and Economic Methodology*. Cambridge: Cambridge University Press, ch. 5 (pp. 70-74). <u>E-reserves</u>

# 3. Popper and Falsificationism

Karl Popper, The Logic of Scientific Discovery, 1959, excerpts. E-reserves.

Karl Popper, "Science: Conjectures and Refuations," in *Conjectures and Refutations*. London: Routledge and Kegan Paul, 1963, pp. 33-58. <u>E-reserves.</u>

Bruce Caldwell, "Clarifying Popper," *Journal of Economic Literature* 29(1), March, pp. 1-33.

- D. Wade Hands, "Karl Popper and Economic Methodology," *Economics and Philosophy* 1(1), pp. 83-99. <u>E-reserves</u> (under "Economics and Philosophy (Part 2)").
- Mark Blaug, "Comment on D. Wade Hands, 'Karl Popper and Economic Methodology: A New Look," *Economics and Philosophy* 1(2), pp. 286-288. <u>Ereserves</u>(under "Economics and Philosophy (Part 3)").
- Mark Blaug "Why I Am Not a Constructivist: Confessions of an Unrepentant Popperian," in Roger E. Backhouse, editor, *New Directions in Economic Methodology*. London: Routledge, 1994, ch. 6 (pp. 109-136). <u>E-reserves (under "Backhouse, New Directions in Economic Methodology (PP. 109-36)")</u>.

## 4. Kuhn and Scientific Revolutions

Thomas Kuhn, "The Nature and Necessity of Scientific Revolutions," in *The Structure of Scientific Revolutions*, 3<sup>rd</sup> ed. Chicago: University of Chicago Press, 1996.

Thomas Kuhn, "The Essential Tension: Tradition and Innovation in Scientific Research," in Boyd et al., ch. 7. <u>E-reserves</u> (under "Boyd et al, Philosophy of Science (Part 1)").

A.W. Coats, "Is there a 'Structure of Scientific Revolutions' in Economics?" Kyklos 22(2), 1969, pp. 289-296.

## 5. Lakatos and the Methodology of Scientific Research Programs

A. Lakatos and the Philosophy of Science

Imré Lakatos, "Falsification and the Methodology of Scientific Research Programs," in Lakatos and Alan Musgrave, *Criticism and the Growth of Knowledge*. Cambridge: Cambridge University Press, 1970, pp. 91-197. <u>Blackboard</u> (six parts)

## B. Lakatos and Economics

- E. Roy Weintraub, "Appraising General Equilibrium Analysis," *Economics and Philosophy*, vol. 1, no. 1, 1985, pp. 23-37. <u>E-reserves</u> (under "Economics and Philosophy (Part 1)").
- Mark Blaug, "Kuhn versus Lakatos or Paradigms versus Research Programmes in the History of Economics," Spiro Latsis, editor, *Method and Appraisal in Economics*. Cambridge: Cambridge University Press, 1976, pp. 149-180. <u>E-reserves</u> (under "Latsis, Method and Appraisal in Economics").
- D. Wade Hands, "Popper and Lakatos in Economic Methodology," in Uskali Mäki, Bo Gustafsson, and Christian Knudsen, editors, *Rational Institutions and Economic Methodology*. London: Routledge, 1993, pp. 61-75. <u>E-reserves</u> (under "Maki et al, Rationality, Institutions. . .").
- Roger Backhouse, "The Lakatosian Legacy in Economic Methodology," in Backhouse, editor, *New Directions in Economic Methodology*. London: Routledge, 1994, pp. 173-191. <u>E-reserves</u> (under "Backhouse, New Directions in Economic Methodology (PP. 173-191)").
- Roger Backhouse, "The Neo-Walrasian Research Program in Macroeconomics," in Neil De Marchi and Mark Blaug, editors, *Appraising Economic Theories*. Aldershot: Edward Elgar, 1991, pp. 403-426. <u>E-reserves</u> (under "De Marchi and Blaug, Appraising Economic Theories (PP. 403-426)").
- Kevin D. Hoover, "Scientific Research Program or Tribe? A Joint Appraisal of Lakatos and the New Classical Macroeconomics," in Neil De Marchi and Mark Blaug, editors, *Appraising Economic Theories*. Aldershot: Edward Elgar, 1991, pp. 364-394. <u>E-reserves (under "De Marchi and Blaug, Appraising Economic Theories (PP. 364-394)")</u>.

### 6. Realism

- Uskali Mäki, "Realism" and "Realisticness," in John Davis, D. Wade Hands, and Mäki, editors, *The Handbook of Economic Methodology*. Cheltenham: Edward Elgar, 1998, pp. 404-413. <u>E-reserves (under "Elgar, Handbook of Economic Methodology (PP. 404-413)")</u>.
- Ian Hacking, "Experimentation and Scientific Realism," in Boyd, ch. 13. <u>E-reserves</u> (under "Boyd et al, Philosophy of Economics (Part 2)").
- Daniel Hausman, "Problems with Realism about Economics," *Economics and Philosophy* 14(2), 1998, pp. 185-213.
- Tony Lawson, "What Has Realism Got to Do With It," *Economics and Philosophy* 15(2), 1999, pp. 269-282. In Davis vol. I.
- Hoover "Is Macroeconomics for Real?", *The Monist* 78(3), July 1995, pp. 235-257. <u>E-reserves</u>.

### 7. Models

- Daniel Hausman, "Models and Theories in Economics," *The Inexact and Separate Science of Economics*. Cambridge: Cambridge University Press, 1992, ch. 5 (pp. 70-82). <u>E-reserves</u> (under "Hausman, Inexact and Separate Science of Economics (Part 1)").
- Allan Gibbard and Hal Varian, <u>"Economic Models,"</u> *Journal of Philosophy* 75(11), 1978, pp. 664-677.
- Robert Sugden, "Credible Worlds: The Status of Theoretical Models in Economics," *Journal of Economic Methodology* 7(1), 2000, pp. 1-31.
- Mary Morgan, "The Technology of Analytical Models: Irving Fisher's Monetary Worlds," Philosophy of Science 64(supplement), December 1997, pp. S304-S314.
- Mary Morgan, "Models, Stories, and the Economic World," Journal of Economic Methodology 8(3), 2001, pp. 361-384.
- Nancy Cartwright, "Fables and Models," in the *Dappled World*. Cambridge: Cambridge University Press, 1999, ch. 2 (pp. 35-58).

### 8. Laws in Economics

- Carl Hempel, "Laws and Their Role in Natural Explanation," *Philosophy of the Natural Sciences*. Englewood Cliffs, NJ: Prentice-Hall, 1966. in Boyd, ch. 16. Ereserves (under "Boyd et al, Philosophy of Economics (Part 3)").
- Daniel Hausman, "Supply and Demand Explanations and Their Ceterius Paribus Clauses," Review of Political Economy 2(2), July 1990, pp. 168-187.
- Nancy Cartwright, "Ceteris Paribus Laws and the Socio-economic Machine," in the Dappled World. Cambridge: Cambridge University Press, 1999, ch. 6 (pp. 137-151). E-reserves.
- Kevin D. Hoover, "Are There Macroeconomic Laws," in *The Methodology of Empirical Macroeconomics*. Cambridge: Cambridge University Press, ch. 2 (pp. 17-56). <u>E-reserves</u> (under "Hoover, Methodology of Empirical Macroeconomics (Part 1)").

### 9. Reductionism and Microfoundations

- Alan Garfinkel, "Reductionism," in Boyd, ch. 24. <u>E-reserves</u> (under "Boyd et al, Philosophy of Economics (Part 4)").
- John Watkins, "Methodological Individualism and Social Tendencies," in Boyd, ch. 39. <u>E-reserves</u> (under "Boyd et al, Philosophy of Economics (Part 5)").
- Maarten Janssen, "Microfoundations," in John Davis, D. Wade Hands, and Mäki, editors, *The Handbook of Economic Methodology*. Cheltenham: Edward Elgar, 1998, pp. 307-310. <u>E-reserves (under "Elgar, Handbook of Economic Methodology (Part 1)").</u>
- Alan Nelson, "Some Issues Surrounding the Reduction of Macroeconomics to Microeconomics," *Philosophy of Science*, Vol. 51, No. 4. (Dec., 1984), pp. 573-594.
- Robert E. Lucas, Jr. and Thomas J. Sargent, "After Keynesian Macroeconomics," Kevin D. Hoover, "Does Macroeconomics Need Microfoundations?" in *The Methodology of Empirical Economics*. Cambridge: Cambridge University Press, 2001, ch. 3 (57-88). E-reserves (under "Hoover, Methodology of Empirical

Macroeconomics (Part 2)").

Alan P. Kirman, "Whom or What Does the Representative Agent Represent?" *Journal of Economic Perspectives* 6(2), Spring 1992, pp. 117-136.

## 10. Causality

- David Hume, *An Enquiry Concerning the Human Understanding*, 1777, section II-VII. [NB. link is to the whole book; print pp. 4-79 of text which is pp. 1-75 of pdf.] David Hume, "Of Interest," in *Essays: Moral, Political, and Literary*, 1754.
- Kevin D. Hoover, *Causality in Macroeconomics*. Cambridge: Cambridge University Press, 2001, chs. 1 and 2 (pp. 1-59). <u>E-reserves (under "Hoover, Causality in Macroeconomics (Parts 1 & 2)")</u>.
- Kevin D. Hoover, *The Methodology of Empirical Macroeconomics*. Cambridge: Cambridge University Press, 2001, ch. 4 (pp. 89-134). <u>E-reserves (under "Hoover, Methodology of Empirical Macroeconomics (Part 3)")</u>.
- James Woodward, "Causation and Explanation in Econometrics," in Daniel Little, *On the Reliability of Economic Models*. Boston: Kluwer, 1995, pp. 9-62. <u>E-reserves</u> (under "Little, On the Reliability of Economic Models).

# 11. Pragmatism

- Charles S. Peirce, "The Fixation of Belief," Popular Science Monthly 12, November 1877.
- Willard V.O. Quine, "Two Dogmas of Empiricism," in From a Logical Point of View, New York: Harper and Row, 1953, ch. 2 (pp. 20-46).
- E. Roy Weintraub, "Methodology Doesn't Matter, But History of Thought Might," in Seppo Honkapohja, editor, *The State of Macroeconomics*. Oxford: Blackwell, 1990, pp. 263-279. <u>E-reserves</u> (under "Honkapohja, State of Macroeconomics).
- Maki "Methodology Might Matter, but Weintraub's Meta-Methodology Shouldn't," *Journal of Economic Methodology*, 1(2), 1994, pp. 215-231.
- Donald McCloskey, How To Do a Rhetorical Analysis, and Why," in John B. Davis, *Recent Developments in Economic Methodology*, vol. I. Cheltenham: Edward Elgar, 2006, pp. 319-342. <u>E-reserves</u> (under "Davis, Recent Developments in Economic Methodology (PP. 142-145)").
- Uskali Mäki, "<u>Diagnosing McCloskey</u>," in *Journal of Economic Literature* 33(3), September 1995, pp. 1300-1318.

## Short Paper Topics and Deadlines

1. (Due 15 Feburary 2007): *Either* 

A. Is Friedman an instrumentalist or a realist or neither or both? (Consider carefully and critically the arguments of Boland and Mäki (Topic 2).)

B. In the "Methodology of Positive Economics," Friedman writes:

Truly important and significant hypotheses will be found to have "assumptions" that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions (in this sense).

In a paper in 1963 (written with Anna Schwartz), Friedman gathers evidence to show that business cycles are caused by fluctuations in the supply of money. Commenting on this evidence, Friedman and Schwartz observe:

It might be, so far as we know, that one could marshal a similar body of evidence demonstrating that the production of dressmakers' pins has displayed over the past nine decades a regular cyclical pattern; that the pin pattern reaches a peak well before the reference peak and a trough well before the reference trough; that its amplitude is highly correlated with the amplitude of the movements in general business. It might even be demonstrated that the simple correlation between the production of pins and consumption is higher than the simple correlation between autonomous expenditures and consumption; that the partial correlation between pins and consumption – holding autonomous expenditure constant – is as high as the simple correlation; and that the correlation between consumption and autonomous expenditures – holding the production of pins constant – is on the average zero. . . [B]ut even if [these statements] were demonstrated beyond a shadow of a doubt, they would persuade neither us nor our readers to adopt a pin theory of the cycle.

Carefully analyze whether these two passages are consistent or contradictory within the context of Friedman's essay on methodology.

# 2. (Due 22 March 2007):

Either

A. Blaug writes in the *Methodology of Economics*:

Popper's methodology of science is an *aggressive methodology* in the sense that by its standards some of what is called "science" can be dismissed as methodologically unsound. Kuhn's methodology,

however, is a *defensive methodology* because it seeks to vindicate rather than criticize actual scientific practice.

Discuss in detail (i.e., explain these two positions. Do you agree with Blaug? If so, why? If not, why not?

B. In the papers published in *Appraising Economic Theories*, Hoover presents an anti-Lakatosian, pro-Kuhnian account of modern macroeconomics, while Backhouse presents a pro-Lakatosian account (see Topic 5.B). Analyzing them carefully, which – if either – do you support? (Note that anyone who takes my side can expect special scrutiny!)

## 3. Due (19 April 2007):

Either

- A. Does macroeconomics need microfoundations? Address carefully the arguments in Lucas and Sargent vs. those in Kirman (see Topic 9) from a philosophical perspective. (Note that I have written on this topic and an article of mine is on the Topic 9 list. Anyone who takes my side of the matter can expect special scrutiny!)
- B. Are economic models stories or fables (or do stories or fables have an important part to play in our understanding or use of models)? Address carefully the arguments of Morgan and/or Cartwright (Topic 7).
- C. Is *micro*economics for real?
- 4. Due (1 May 2007):

Either

A. What is economics and what method is proper to it? (That is, consider the kind of issues raised in Topic 1 of the readings in light of what you have learned this semester.)

B. Can economics dispense with methodology?