Course Description

On average, American cars today are somewhat smaller than 30 years ago. Why? Because Americans are more interested in conserving natural resources (gasoline and crude oil) than before? Is it because the price of gasoline is higher now? Because of national laws requiring automakers to make more fuel-efficient cars? Because of competition from Japanese automakers, who always have built smaller cars than U.S. automakers? Is it because more Americans drive trucks or SUV’s now? Each of these reasons has been proposed as the explanation for smaller cars. Is any one of these “the correct explanation”? Are they all correct?

This course is not designed to analyze the automobile market but to ask “How can we distinguish good explanations of economic events from bad ones?” Answering this question is a difficult task and requires an interdisciplinary study of the philosophy of science, the philosophy of social science, and economics. As a result, this course will investigate both what philosophers have to say about explanation in the physical and social sciences as well as what economists themselves have said about the proper method of explanation for their own field.

Prerequisite

The course is intended for students of philosophy and for students of economics. As a prerequisite, class participants need to have already completed either two courses in philosophy or two courses in economics.

Course Objectives

There are three principal objectives for this course:

1. The first is to help you become familiar with the arguments within the philosophy of science and the philosophy of social science concerning the requirements for good scientific explanation. We will find that one of the most fundamental questions at stake here is whether the social sciences should use basically the same approach to explanation employed by the physical sciences or whether a different one is required due to the fact that it is human behavior and not the regularity of nature which is to be explained.
2. The second objective is to help you become familiar with the arguments within economics about the character of economic explanations. Here we shall see differences in the philosophy of social science between different “schools” of economic thought and even within some of them.

3. The third objective is to assist you to learn how to approach and analyze texts that are written from a perspective quite different from your own. While all our readings will be in English, both the language and method of analysis may at times seem foreign to you. It is a critical part of a liberal arts education that students learn to read and understand texts and points of view quite different from one another.

Required Books


Preparations for In-Class Discussions

Social scientists who study the process of teaching and learning have long known that the key to good learning is an active learner. Sounds obvious, but it’s important to keep that in mind.

Because you will only learn well if you stay active as a learner, a primary method in our classroom will be discussion, sometimes with the whole group, sometimes in small groups of two or three. Researchers have found that students learn faster and retain their knowledge longer if they express what they are learning to someone else. The act of discussing our common readings, then, is an ideal method for this, since it not only leads you to express what you know about the texts but it also gives each student the opportunity to be questioned about the issues involved.

To improved our conversations, there will be four kinds of assignments related to our daily discussions:

1. Each day, each student in the class will need to hand in a one-paragraph (12 lines maximum), written response to “the question of the day,” a question given ahead of time by the instructor. These must be typed, double spaced, and they will be graded. Over the semester, such assignments will be worth approximately 25% of your final grade. The “question of the day” is intended both as a directly helpful assignment and as an indirectly helpful “gimmick.” It will be directly helpful because you will need to wrestle with one or more of the most important ideas in the reading in order
to answer it. To some extent, the question of the day is a “gimmick” – in that it will force you to do the assigned reading before class. Research has shown that students who have done the reading ahead of time not only learn from their reading but, just as importantly, learn more in the classroom because of their better preparation.

Each question of the day will be worth 10 points. Because they are intended to improve your learning during the subsequent class, an automatic 3-point lateness penalty will be assessed for any question of the day not handed in at the start of the class. An additional 2-point penalty will be assessed if it is not handed by the start of the next class period.

2. Each day, four particular persons will be designated to help begin our discussion of the reading by taking a role and answering one of the following questions:

   a. **Summarizer**: How would you summarize in one sentence the overall “message” of the reading?

   b. **Detailer**: What are the (3 to 5?) most important things that the author is saying?

   c. **Starter**: What is the most difficult idea in the reading (the one most needing clarification)?

   d. **News Reporter**: Read about current events and disputes (in a daily newspaper, magazine, The Record, etc.) and identify an issue that entails a dispute based in the different views of the quality of some explanation.

   The people assigned to do this that day will need to arrive five minutes early and write their results on the board before class starts. On the days when you are assigned one of these roles, type up your contribution on the bottom of your question of the day in addition to putting it on the board prior to class. During the semester, all students will rotate through each of these roles. Performance in these roles and in the class discussion will count for about 10% of your final grade. Such performance will be particularly influential for those whose final grades are “on the fence” between two grades when all other factors have been taken into consideration.

3. From time to time there will be a writing assignment in class that will then be collected and graded. These will not be announced ahead of time and will account for about 5% of the final grade.

**Debates and Position Papers**

To sharpen your understanding of the issues addressed in this course, you will be responsible for both preparing a position paper on a disputed topic in economic science (or a
related issue in public policy) and debating the issue in class with another student. The paper and the debate should make clear how differences in scientific explanations (or in subsequent recommendations for economic policy) can often be traced to differing methodological perspectives of divergent schools of economics. Since most of the course will be examining general theoretical statements about method, this concrete examination of an economic issue will be critical to understanding the practical import of philosophy in economics.

Students will be asked later in the course to express a preference about a number of possible topics. Then, through a process of negotiation, each student will be grouped with one other to work together to develop two separate position papers on the topic, with one student arguing for each side.

During the last two weeks of the term, these student teams will debate the issue orally in class, with the rest of the class acting as critics of both the form and the content of the presentations. Two classes prior to the day of your debate, you and your debate partner will each have to submit an 8-page position paper (typed and double spaced), summarizing the methodological and other principles supporting your position in the argument and answering the objections from the other side. Because the parties to the debate work together in preparation, there should be no surprises. Each student’s grade for this joint project will be based on the instructor’s evaluation of the debate, two position papers, each student’s self-evaluation of participation in the group project, and on an evaluation of each student’s participation by the other member of the team.

The debate and position paper will count for about 10% of your final grade. More details on this will be distributed later in the course.

Examinations

There will be three exams during the semester, each worth 20% of your final grade. There will not be a final examination.

How To Study In This Course

The following steps are proposed as the most effective ways to learn in this course:

1. Read the assigned readings twice and take action to personalize the material, either highlighting the book or developing your own set of reading notes or using any other method which aids you. But do not just read passively.

2. Do not wait until “the last minute” to read! Plan to finish reading early. It would be helpful to develop a list of questions that arise for you from each reading.

3. Think about the question of the day long before you write out your answer. It helps to think about it as you read, but don’t focus only on it. You’ll be responsible for the whole reading.
4. Ask questions in class when you don’t understand something. Participate actively in discussions.

5. Take notes in class (and, if it is helpful to you, redraft them after class).

6. Optionally, work with a partner or two outside of class on a regular basis. All will benefit through learning more from this cooperation.

Attendance
You are expected to attend all class sessions. Many of the readings are difficult to understand and our discussions in class will often be crucial to your grasping the analysis in the reading. You may also be expected to attend additional events, for example, relevant lectures on one of the campuses.

Evaluations
The primary goals of this course are listed on page one of this syllabus. At the same time, however, academic traditions (and rules!) require that your performance be evaluated. Grading will be based on the A-F scheme unless you request S-U grading by the deadline listed below. See CSB/SJU Catalog for rules governing S-U grading. Your final grade will be determined in approximately the following manner:

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions of the day</td>
<td>18%</td>
<td>250</td>
</tr>
<tr>
<td>In-class written assignments</td>
<td>6%</td>
<td>80</td>
</tr>
<tr>
<td>Class Participation</td>
<td>8%</td>
<td>120</td>
</tr>
<tr>
<td>Position Paper</td>
<td>14%</td>
<td>200</td>
</tr>
<tr>
<td>Three exams</td>
<td>54%</td>
<td>750</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>1400 points</strong></td>
</tr>
</tbody>
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Conversion of points earned by the end of the semester into letter grades will be as follows:

- 1080 points or above  A
- 1020 points          AB
- 960 points           B
- 900 points           BC
- 840 points           C
- 780 points           CD
- 720 points           D
- 719 points           F

There is no “curve” for the grading. Everyone can earn an “A” – or any other grade – depending on the points earned during the term.
**Deadlines**

1. Monday, April 10\(^{th}\): Last day to withdraw from a semester-long course (with the grade of “W”). After that you cannot drop the course and the professor must give you the grade you earn in the course.

2. Monday, April 10\(^{th}\): Last day to request S/U grading in this course.

**Suggestions**

You are encouraged to share your comments on the course with the instructor at any time during the semester. Please don’t hesitate to make recommendation.
Course Schedule

(A lower-case “a” below indicates the first quarter of a page, “b” the second, etc.)

Introduction

1. Syllabus and Introductory Discussion Mon., Jan 16

2. Introduction: What is Scientific Explanation
   a. Daniel Hausman, Wed., Jan 18
      i.) “Introduction to Philosophy of Science,” in Hausman, pp. 4-15

The Philosophy of Science

1. John Stuart Mill: *System of Logic: Ratiocinative and Inductive*
   a. Book II: Of Reasoning Fri., Jan 20
      i.) Ch I: cf Induction 125b-126d
      ii.) Ch II & III: Inference, syllogism, induction and deduction
           132-143c, 146c, 148c-151c, 152d-154a
      iii.) Ch IV: deductive and experimental sciences 158-162a,
           164b-167
      iv.) Ch V: “Necessary” truths 168-170a, 172c-173, 188b-189a

   b. Book III: Of Induction Tues., Jan 24
      i.) Ch III The problem of induction 223b-225c, 227d-228
      ii.) Ch IV: the laws of nature 229-234a
      iii.) Ch V: the law of universal causation 235d-238b, 241,
           244c-246b, 248d-251a (plus footnote on p.250)
      iv.) Ch VI: the composition of causes 266c-267d, 270b
      v.) Ch VIII: the first two of four methods of experimental
          Inquiry: agreement & difference 278-283a

   c. Book III, Of Induction (continued) Thurs., Jan 26
      i.) Ch VIII (continued): The methods of residue and concomitant
          variation 283a-287d, 291d
      ii.) Ch X: plurality of causes and intermixture of effects
           311-313c, 315a-c, 318a-325b
      iii.) Ch XI: Of the Deductive Method, pp. 325b-326a, 329d-330b,
           331b-c
      iv.) Ch XII: Of Explanation of Laws of Nature, pp. 332a,and 337
      v.) Ch XIV: the limits of explanation of laws of nature and
          scientific hypotheses 349b-d, 352c-353c
      vi.) Ch XVI: empirical laws 366b-d, 368b-369c
      vii.) Ch XXI: evidence for the law of universal causation,
            397d-399b, 400d-403d
2. Carl Hempel: *Aspects of Scientific Explanation*
   a. Deductive nomological explanation, 333-338c, 343d-346a, 347b-354a  
      Mon., Jan 30
   b. Laws, predictions, & explanation 359a-76c  
      Wed., Feb. 1
   c. Statistical explanation 376c-93, Pragmatic aspects of explanation 425c-433d  
      Fri., Feb. 3

3. Karl Popper:  
   a. “The Reaction to Inductivism: Popper and Falsification”  
      from David Oldroyd, *The Arch of Knowledge*:  
      Tues., Feb 7

4. Thomas Kuhn, Imre Lakatos, and Paul Feyerabend:  
   a. Science as Dynamic Social System: Kuhn, Lakatos, and  
      Feyerabend 318-347c, from Oldroyd.  
      Thurs., Feb 9

**Examination #1**  
Mon., Feb 13

**The Philosophy of Social Science**

1. John Stuart Mill:  
   a. On the Logic of the Moral Sciences, Book V, pp.606-609, 614-616c, 619-621b,  
      622c-633b, 652-655a, & 656d-658  
   Wed., Feb 15

2. Carl Hempel.  
   i.) Rationality and explanation-by-reasons, in *Aspects of  
       Scientific Explanations*, pp. 463-86  
   Fri., Feb 17

3. Michael Scriven  
      Analysis”  
   Tues., Feb 21

4. Peter Winch: *The Idea of Social Science*  
   a. pp. 1-33b, 40-51c  
   Thurs., Feb 23

**Spring Break**

   b. pp. 51d-62c, 66-94  
   Mon., Mar. 6
   c. pp. 131d-136, 95-116a, 121-129b  
   Wed., Mar. 8

**Examination #2**  
Fri., Mar 10
Economic Methodology

1. Classical Political Economy:
   Tues., Mar 14

2. Karl Marx
   i.) “Ideology and method in political economy” from Grundrisse, 119-123d, 125c-127b, 129-132a, 135d-140, in Hausman
   ii.) Marx, “The Materialist Conception of History” (excerpts from German Ideology, Poverty of Philosophy, etc.), T.B. Bottomore  
   Thu., Mar 16

3. British Historical School:
   i.) T. E. Cliffe Leslie, “On the Philosophical Method of Political Economy” (1876)  
   Mon., Mar 20

4. Institutionalism:
   Wed., Mar 22
   c. Clarence E. Ayres
      i.) “The Co-ordinates of Institutionalism”
      ii.) “The Nature and Significance of Institutionalism”  
   Fri., Mar 24

Research Day (no class)  
Tues., Mar 28

5. The Move Toward Positivism: Lionel Robbins
   i.) The Nature and Significance of Economic Science (1935), 83-106 in Hausman  
   Thu., Mar 30

   Mon., Apr. 3

   Wed., Apr 5

8. Reactions to Friedman
   Fri., Apr 7

   a. “Feminism and Economics,” handout

Easter Recess
10. Donald McCloskey  
    i.) “The Rhetoric of Economics” 396a-405a, 406d-409a, 411b-413a, 418d-421b, 423b-440, in Hausman

Examination #3  
   Thu., Apr 20

Research Day  
   Mon. Apr 24

Presentation Days

1. Day 1  
   Wed., Apr 26

2. Day 2  
   Fri., Apr 28

3. Day 3  
   Tues., May 2

4. Day 4  
   Thurs., May 4