

Fall 2017 Syllabus (Aug 23 thru Dec 7)
Philosophy of Science, PHIL 3372W 02 (81630)
Sam Houston State University

Professor: Alan C. Clune, Ph.D.

Office: CHSS Rm. 349 Huntsville Campus

Class: Nighttime Course meets at The Woodlands Center Rm. 130, Tuesdays 6PM - 8:50PM

--starting Tuesday Aug 29th

Office Hours: Huntsville Campus TR 10AM-11AM or By Appointment (Can meet by appointment before class in The Woodlands)

Office Phone: 294-4327, email clunea@shsu.edu

Psychology and Philosophy Dept. Phone: 294-1174

1. Description

This course explores some of the philosophical problems that arise with respect to considerations in science. The first part of the course will focus on traditional problems in Philosophy of Science. The second part of the course will focus on the conflict that can occur between science and society. The third part of the course will be an exploration of how problems in philosophy of knowledge and problems in psychology are related.

Credit Hours: 3

2. Description of Approach

Class size necessitates the traditional lecture format. However, participation is encouraged. Students are encouraged to offer their own insights and freely ask for clarification.

3. Objectives

Fundamental Objectives

- Learning to analyze and critically evaluate ideas, arguments, and points of view.
- Learning fundamental principles, generalizations, or theories.
- Learn Facts

Specific Objectives

- Understand problems in philosophy of mind and how research in psychology has attempted to contribute to their resolution.
- Understand contributions to philosophy of science which attempt to answer the following sorts of questions:
 1. What is a scientific explanation?
 2. To what extent can scientific claims ever be justified or shown to be true or false?
 3. How do scientific theories change over time?
 4. How does science and society sometime conflict?

4. Requirements

Two Exams

Exam #1 (Essay, 45% of grade)

Final Exam, not cumulative (Essay and Multiple Choice: 45 % of grade)

True/False Quizzes or Written Homework/Group Work (10% of Grade)

To get these points you need to read carefully.

Participation (Bumps you up a grade if you are within 1 point of a higher letter grade)

Participation means asking constructive questions or making constructive comments during class-time. Asking for clarification does count as participation.

Attendance does not count as participation.

5. Writing Enhanced Course

This is a “W” course, which means that at least 50 percent of your course grade will be derived from writing activities designed to help you master course objectives. In order to facilitate this, I will be giving take-home written exams. And I will provide the essay questions of the exam in advance of giving the official exam out. For each exam, student will therefore have a chance to receive feedback on the essays by submitting a draft of their answers to the essays at least two weeks before exams will be due. I will return feedback to the student at least three days before the exams are due to be handed in.

5. Course Policies

ABSENCES: In accordance with University regulations, I take roll every period. I make no use of the absence record in determining grades. However, if you do not attend class, **YOU MUST DROP THE COURSE**; otherwise you will receive an F. For any days absence, you are responsible for any information from that class period (notes, announcements of assignments, etc.)

LATENESS: Lateness is unacceptable. If I decide that you are systematically ignoring this lateness policy, you will begin to lose ¼ point off your final grade each time you come in late.

MAKE-UPS: If one is necessary, it is likely to be longer and more difficult than the regular test. You must have a good reason for missing a test; having another test the same day, for example, does not count as a good reason. If you do miss a test, see me as soon as possible. Your excuse must be written out and appropriately documented. **ANY EXCUSE THAT CANNOT BE VERIFIED WILL RESULT IN A GRADE OF ZERO FOR THAT EXAM.** If you do have a valid excuse, then we should make the arrangements for you to take a make-up **AS SOON AS POSSIBLE.**

INSTRUCTOR EVALUATIONS: Students will be asked to complete an IDEA evaluation form toward the end of the semester.

ACADEMIC DISHONESTY: Anyone caught plagiarizing or cheating will receive an F *for the course.*

UNCOLLECTED ASSIGNMENTS: I hold onto uncollected graded assignments until the first day of the next semester. If you have not collected them by then, they will be thrown away.

USE OF LAPTOPS: No Use of laptops at all. Notes should be taken by hand.

USE OF CELL PHONES: No use of cell phones at all.

.6. ADMINISTRATION POLICIES

STUDENT SYLLABUS GUIDELINES: Go to the following website for fuller information on syllabus guidelines:

<http://www.shsu.edu/syllabus/>

RELIGIOUS HOLIDAYS: Students are allowed to miss class and other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Students remain responsible for all work. *See Student Syllabus Guidelines* Link above. See link below for additional information:

</dept/academic-affairs/documents/aps/students/861001.pdf>

NOTICE TO PERSONS WITH A DISABILITY: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should visit with the Office of Services for Students with Disabilities located in the:

Lee Drain Annex (next to the Farrington Building), E-mail: disability@shsu.edu, web address:

<http://www.shsu.edu/dept/disability/index.html>

For additional information:

<http://www.shsu.edu/dotAsset/7ff819c3-39f3-491d-b688-db5a330ced92.pdf>

ACADEMIC DISHONESTY: Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. *See Student Syllabus Guidelines*. See below link for details:

<http://www.shsu.edu/syllabus/>

CLASSROOM CONDUCT: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Students are to treat faculty and students with respect. Students are to turn off all cell phones while in the classroom. Under no circumstances are cell phones or any electronic devices to be used or seen during times of examination. Students may tape record lectures provided they do not disturb other students in the process. University code of conduct can be found here:

<https://netreg.shsu.edu/mirror/codeofconduct.html>

VISITORS IN THE CLASSROOM: *Unannounced visitors to class must present a current, official SHSU identification card to be permitted into the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered*

student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

This policy is not intended to discourage the occasional visiting of classes by responsible persons. Obviously, however, the visiting of a particular class should be occasional and not regular, and it should in no way constitute interference with registered members of the class or the educational process.

REGISTERING FOR CLASS: I cannot add anyone to the course, for any reason whatsoever, after the deadline for adding. This policy holds even if you were dropped due to financial aid reasons.

Q-DROPS: For Q-Drop Policy see the Academic Calendar for the current semester accessible from the SHSU homepage. There is now a limit of 5 Q-Drops for each student's undergraduate career at SHSU. Q-Drops from other institutions and Q-Drops that occurred before Fall 2004 are not counted toward the limit of 5. Students who have reached their limit can petition the Dean to for another Q-Drop. If refused, they must stay registered for the course.

Last day to Q-Drop: **Nov 10**

7. GRADING SCALE (Your Course grade SO FAR can be found on the blackboard under "Weighted Total." Before all grades are in, the weighted total merely tells you what grade you would get if you continue doing the same quality work as you have been doing. When all grades are in, it represents your course grade.

90-100	A
80-89.99	B
70-79.99	C
60-69.99	D
0-59.99	F

NOTE: I do *NOT* round up. Please don't ask me to.

8. Texts

1. Godfrey-Smith, Peter. 2003. *Theory and Reality*. (Chicago: University of Chicago Press)
2. Gopnik, Alison, Meltzoff, Andrew, and Kuhl, Patricia. 1999. *The Scientist in the Crib* (New York: Harper Collins Publishers)
3. Miller, Kenneth. 1999. *Finding Darwin's God* (New York: Harper Collins Press).

9. Tentative Course Organization

PART I: Traditional Problems in Philosophy of Science (*Theory and Reality*)

Readings/Exams (Each reading takes approximately one three hour class)

1. This reading/lecture introduces philosophy of science and explains the logical positivist movement in philosophy of science
Smith, Chapter 1 and 2.
2. Chapter 3's reading/lecture is on Hume's problem of induction, the structure of induction, and Carnap's notion of confirmation. Chapter 4's reading/lecture is on Karl Popper and his falsification method for doing science.
Smith Chapter 3 and 4.
3. Chapter 5's reading is on Thomas Kuhn's view on normal science. Included in this is his notion of paradigms. Chapter 6's reading is on Kuhn's view of how science changes by a kind of revolution.
Chapter 5 and 6.
4. Chapter 7's reading are on philosophers who came after Kuhn who tried to improve Kuhn's way of understanding scientific process and change. These philosophers are Lakatos, Laudan, and Feyerabend.
5. Chapter 12's reading lecture is on scientific realism and its critics. This involves asking whether science uncovers entities or phenomena that actually exist in reality.
Chapter 12

Exam 1 (TBA)

Part II: A Case study on the Conflict between Science and Society (*Finding Darwin's God*)

1. The first two readings/lecture introduce Darwin's argument for evolutionary theory and some of the evidence behind in support of evolutionary theory.
Chapters 1 and 2.
2. Chapter 3's reading/lecture introduces the conflict that exists between Christianity and the Theory of Evolution. It also offers criticism of the Young Earth Creationists' alternative hypothesis. Chapter 4's reading/lecture is on whether there is a problem with the fossil record as the proponents of intelligent design believe.
Chapters 3 and 4.
3. Chapter 5 reading/lecture offers a criticism of Michael Behe's irreducible complexity argument against evolution. Chapter 6 reading/lecture is about the conflict between scientists and theologians as played out by prominent people on both sides.
Chapters 5 and 6.
4. Chapter's 7 and 8 are about the framing of the above conflict as an opposition between a materialistic world view and a spiritual world view. Here the author uses what we know from quantum physics to offer a resolution to the opposition between these two worldviews.
Chapters 7 and 8.

Part III: Epistemology, Cognitive Science, and Infant Research (*The Scientist in the Crib*)

1. Chapter 1's reading/lecture introduces the philosophical problems of other minds, the external world, and language. Chapter 2 is on the authors' answer to how children come to know about other minds/people.

Chapter 1 and 2.

2. Chapter 3's reading/lecture is on how children come to know about the external world. Chapter 4's reading/lecture is on how children come to understand language.

Chapter 3 and 4.

3. Chapter 5's reading/lecture is on, generally speaking, what scientists have learned about children's minds. Chapter 6 reading/lecture is on what scientists have come to know about children's brains.

Chapter 5 and 6.

Final Exam (Tuesday, Dec 5th 8:30PM-10:30PM)