

Philosophy 325: Philosophy and Biology
California State University, Northridge
Fall 2013

Ticket number: 18149

Classtime: Mondays & Wednesdays 11:00 AM – 12:15 PM

Room: Sierra Hall 207

Instructor: Mitchell Herschbach

Instructor's email: mitchell.herschbach@csun.edu

Office: Sierra Tower **TBD**

Office Hours: Mondays & Wednesdays 9:45-10:30AM, 12:30 – 1:15PM, and by appointment

Office Phone: **TBD** Note: call only during office hours—cannot leave a message

Course website: <http://moodle.csun.edu/>

Prerequisites: Completion of the lower-division writing requirement.

Catalog Description

The course addresses philosophical issues central to biological sciences, including the creation/evolution debate and other social implications of contemporary biological theories. It also introduces basic concepts in philosophy of science, such as demarcation, scientific explanation, and the scientific method, which are necessary for examining the above issues. (*Available for General Education, Subject-Explorations: Arts and Humanities*)

Course Objectives and Student Learning Outcomes

Students will:

- gain an understanding of the central concepts and issues in philosophy of science and philosophy of biology, which include the differences between science and pseudo-science, the nature of scientific theories, the debate between creationism/intelligent design and Darwinism, and other social and ethical implications of advances in the biological sciences
- develop the ability to read and analyze philosophical texts and arguments
- develop their skills in writing clearly, precisely, concisely, logically, and persuasively

Course Materials

- Readings and other materials posted on Moodle

Course Requirements

1. Attendance and Participation (5%)

You are expected to read the assigned texts before coming to class and arrive to class prepared to discuss them. These in-class discussions will be essential to your adequately understanding the required texts and ultimately doing well on the assigned papers. This is why attendance and participation is part of your overall grade in this course. I will take attendance at the beginning of every class. If you arrive late, it is your responsibility to ensure that I mark you as present, without disrupting the flow of class; you will earn partial credit for late attendance. See below my policy about legitimate excuses for missing class.

Your participation grade will be determined by your participation in class discussions and in some cases, perhaps, the quality of your participation in class discussions; as well as your completion of any in-class projects, activities and assignments.

2. Reading Responses (20%)

In order to ensure that you are reading and thinking about the assigned readings before coming to class, and to encourage more informed and deeper discussions in class, you will write weekly Reading Responses on the assigned readings.

- Your responses should be one to two paragraphs in length, where you:
 - In a few sentences summarize the main ideas/arguments of the assigned reading
 - Describe your own question(s) and/or comment(s) about the reading. You can identify anything in the texts that you do not quite understand, such as a concept, a statement, a step in a key argument, or what the author tried to do in general. You can also add your own comments to critique or improve the original texts.
- Responses will be graded on effort; you must demonstrate that you engaged with the assigned reading to earn full credit. Partial or no credit will be given for incomplete responses or ones which do not demonstrate that you actually did the reading.

3. Three Papers (25% each, 75% total)

You will write three papers, each about 4-5 pages (1,200-1,500 words) in length, on assigned topics. I will distribute each topic, as well as details about each assignment, well before its deadline.

Grades

Letter grades will be assigned using the plus/minus system, as follows:

A	=	93-100%	B+	=	87-89%	C+	=	77-79%	D+	=	67-69%	F	=	59-0%
A-	=	90-92%	B	=	83-86%	C	=	73-76%	D	=	63-66%			
			B-	=	80-82%	C-	=	70-72%	D-	=	60-62%			

Expectations

I expect you to:

- carefully read the assigned texts before the class meeting indicated on the syllabus
- bring the assigned texts to class with you
- complete any assigned reading responses by submitting them online and having your responses in class to use in class discussion
- attend class and participate in class activities and discussion
- regularly (at least once a day) check your CSUN email for announcements about the course. If you prefer to use another email account, make sure that you have your CSUN email forwarded to the other email account.
- if you have any questions or problems, come see me during office hours or contact me via email—I'm here to help!

Policies

Email

Email is a good way to reach me to ask questions about the course. I will do my best to respond to emails within 24 hours—though I often respond much sooner than that. For questions that need a longer response, I may ask you to meet in person.

General Policy About Excuses For Missing Class or An Assignment Deadline

Legitimate excuses for missing class or not completing an assignment on time include (but are not restricted to) being ill or having a death in the family. Having an assignment for another course due the same day, for example, is not a legitimate excuse. Be prepared to provide documentation of your excuse (e.g., doctor's note) if requested. Whatever the issue, it is essential that you contact me about your situation as soon as you know about it. Any delay will risk forfeiting your chance to be excused or be given an extension on an assignment.

No Extra Credit

I will assign no extra-credit work. There is nothing that you, individually or collectively, can do for extra credit.

Classroom Conduct

Please arrive to class on time. Students should be respectful of their fellow classmates, allowing them to finish before speaking, listening to and respecting classmates' views/opinions. In addition, students must silence all telephones, music players, etc., before entering the classroom. Laptops and other electronic devices may only be used for note taking.

Special Accommodations

If you have a disability and need accommodations, please register with the Disability Resources and Educational Services (DRES) office or the National Center on Deafness (NCOD), and inform me as soon as possible of any accommodations they determine you are eligible for. The DRES office is located in Bayramian Hall, room 110 and can be reached at (818) 677-2684, <http://www.csun.edu/dres/index.php> NCOD is located on Bertrand Street in Jeanne Chisholm Hall and can be reached at (818) 677-2611, <http://www.csun.edu/ncod/> If you would like to discuss your need for accommodations with me, please contact me to set up an appointment.

Academic Integrity

Students are expected to conduct themselves in accord with university policies on Student Conduct and Academic Dishonesty, which are found in the University Catalog, Appendix E:

<http://www.csun.edu/catalog/appendices.html#E1>

Cheating will not be tolerated, and any student who violates this policy will, at a minimum, earn a zero for the assignment; further punishment may include failing the class and being subject to further disciplinary actions from the University. You are responsible for familiarizing yourself with these policies; ignorance is not an excuse. If you have any questions about these policies, feel free to contact me.

Schedule

This schedule is tentative and subject to revision. The current version of the syllabus will be posted on Moodle.

	Date	Topic and Readings
Week 1	Mon 8/26	Introduction to course
	Wed 8/28	What is Science? Popper, "Science: Conjecture and Refutations"
Week 2	Mon 9/2	No Class – Labor Day Holiday
	Wed 9/4	Lakatos, "Science and Pseudoscience"
Week 3	Mon 9/9	Thagard, "Why Astrology is a Pseudoscience"
	Wed 9/11	Scientific Explanation Newton-Smith, "Explanation"
Week 4	Mon 9/16	Evaluating Scientific Theories Klemke et al., "Confirmation and Acceptance: Introduction" Giere, "Justifying Scientific Theories"
	Wed 9/18	Kuhn, "Objectivity, Value Judgment, and Theory Choice"
Week 5	Mon 9/23	Darwinism vs. Creationism & Intelligent Design Theories Paley, "Natural Theology"
	Wed 9/25	Darwin, "Origin of Species"
Week 6	Mon 9/30	Ruse, "Evolutionary Biology" Paper #1 Due
	Wed 10/2	Denton, "Beyond the Reach of Chance"
Week 7	Mon 10/7	Dawkins, "Accumulating Small Changes"
	Wed 10/9	Michael Ruse, "Creation Science is Not a Science"
Week	Mon 10/14	Larry Laudan, "Commentary: Science at the Bar - Causes for Concern"

8	Wed 10/16	Kitcher, "Believing Where We Cannot Prove"
Week 9	Mon 10/21	Behe, "Irreducible Complexity: Obstacle to Darwinian Evolution"
	Wed 10/23	Sober, E. "What Is Wrong with Intelligent Design?"
Week 10	Mon 10/28	Sociobiology and Evolutionary Psychology on Human Nature Wilson, "Heredity" Cosmides & Toobz, "Evolutionary Psychology: A Primer"
	Wed 10/30	Thornhill and Palmer, "A Natural History of Rape"
Week 11	Mon 11/4	Lloyd, "Science Gone Astray: Evolution and Rape" Paper #2 Due
	Wed 11/6	Vickers & Kitcher, "Pop Sociobiology Reborn: The Evolutionary Psychology of Sex and Violence"
Week 12	Mon 11/11	No Class - Veteran's Day Holiday
	Wed 11/13	Paleofantasies Cordain, "The Paleo Diet" Zuk, "Paleofantasies" selection 1
Week 13	Mon 11/18	Zuk, "Paleofantasies" selection 2
	Wed 11/20	Genetically Modified Organisms Prince Charles, "A Royal View" Dawkins: "An Open Letter to Prince Charles"
Week 14	Mon 11/25	Silver, "The Environment's Best Friend: GM or Organic?"
	Wed 11/27	Castle, "Acceptance of Biotechnology in a Risk Society"
Week 15	Mon 12/2	Genetic Engineering and Human Enhancement Savulescu, "Genetic Engineering"
	Wed 12/4	Review previous
Week 16	Mon 12/9	Review previous
	Wed 12/16	Paper #3 Due