

**PHIL 478**  
**Philosophy and Evolution**  
Tuesday/Thursday 1:00-2:15

**Instructor:** Jessica Pfeifer  
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**Office Hours:**  
**Course Room #:**

**Functional Competency Satisfied by this Course:** Critical Analysis and Reasoning

**Goals and Expectations:**

The goal of the course is to expose students to philosophical debates associated with the Theory of Evolution. The first part of the course will consider foundational questions in evolutionary theory. Among the questions we will consider are: How ought we understand natural selection and “survival of the fittest”? Ought natural selection be understood as a cause of evolution? What does it mean to claim that organisms are adapted to their environments?

The second part of the course will consider some of the broader implications of evolutionary theory. Among the questions we will consider are: Can we make sense of there being a “human nature”? What does evolutionary theory imply about biological groupings, such as racial groups? Can evolutionary theory be used to explain social phenomena? Can it be used to explain psychological phenomena? Ought evolution inform our ethical theories?

The course is also aimed at helping students hone their philosophical skills through reading professional articles, participating in class discussions, and writing essays.

The course will consist of a combination of lecture and discussion. One cannot learn philosophy well without participating in discussion. I also strongly encourage you to make use of my office hours. If for some reason you cannot attend my scheduled office hours, appointments at other times can be arranged.

**Methods of Evaluation:**

<b>6 Summaries of Readings:</b>	30% of Final Grade
<b>3 Critical Discussions of Readings:</b>	15% of Final Grade
<b>Final Essay:</b>	40% of Final Grade
<b>Class Attendance &amp; Participation:</b>	15% of Final Grade

Unless you have a very good excuse (serious illness, death in the family, etc.) **and** you notify me **before** the assignment is due, late assignments will be graded down 1/3 of a letter grade for each day late. For example, if your work earns an A-, but you take the exam 1 day late, you will receive a B+.

**Class attendance and participation are required.** One cannot learn philosophy well without participating in class discussion. Moreover, I will be presenting material in class that is not in the reading. If you miss a class, try to get another student's notes, and you are always welcome (and encouraged) to discuss the material with me.

### **Summaries & Critical Discussions:**

Over the course of the semester, you will turn in 6 summaries and 3 critical discussions of the readings for that day. The summaries should be 1 ½- 2 pages (12 point, times new-roman, with 1" margins, and double-spaced). The critical discussions should also be 1 ½ - 2 pages double-spaced (12 point, Times New-Roman, with 1" margins, and double-spaced). These **CANNOT be turned in late.** They must be turned in by the day of the class in which the reading is being discussed. The goal is to help you learn to read and think about philosophy on your own and to help you prepare for class discussion. **2 of the summaries and 1 of the critical discussions must be turned in during the first half of the course, by October 10. 2 of the summaries and 1 of the critical discussions must be completed October 22 or later.** You may turn in 1 extra summary and 1 extra critical discussion during the course of the semester. Your top 6 summaries and your top 3 critical discussions will count toward your final grade.

The summaries and critical discussions should be **your own work**. If you use someone else's ideas or any other material that is not your own, **YOU MUST make the appropriate citations**, this includes material on-line or from another student. If you don't, this counts as plagiarism and will result in an 'F' on the assignment or an 'F' in the course, or even more serious consequences. Please ask if you have any questions at all.

For the summaries, the goal is to clearly and concisely summarize the author's main points and arguments for these.

For the critical discussions, you should focus on problems with the views presented in the article. You needn't criticize the entire article. It is okay to criticize just one aspect of the author's argument. These criticisms can be problems internal to the arguments of the authors, or they can be problems that arise from considerations outside those particular articles. Basically, any relevant philosophical criticism can be raised. The goal of the critical discussions are to hone your critical thinking and presentation skills, help you to prepare to write a better final essay, and to lead to fruitful in-class discussions. You should not use sources outside those used for this class. The point is not to forget stuff you've learned elsewhere. However, the goal is for you to think about the material on your own. If you do use other sources, make sure you make the appropriate

citations. Otherwise, you will be guilty of plagiarism and subject to getting an F on the assignment, an F for the class, or even more serious consequences. Remember that the goal is for you to think about the articles on your own. These are NOT research papers. **I want YOU to think about and criticize the material.**

### **Student Integrity:**

#### **UMBC Statement of Values for Academic Integrity**

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the [UMBC Student Handbook](#), or the [Office of Undergraduate Education](#).

### **Student Disability Services (SDS):**

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. Services for students with disabilities are provided for all students qualified under the Americans with Disabilities Act of 1990, the ADAA of 2009, and Section 504 of the Rehabilitation Act who request and are eligible for accommodations. The Office of Student Disability Services (SDS) is the UMBC department designated to coordinate accommodations that would allow for students to have equal access and inclusion in their courses.

If you have a documented disability and need to request academic accommodations, please refer to the SDS website at [sds.umbc.edu](http://sds.umbc.edu) for registration information or visit the SDS office in the Math/Psychology Building, Room 212. For questions or concerns, you may contact us at [disability@umbc.edu](mailto:disability@umbc.edu) or (410) 455-2459. If you require accommodations for this class, make an appointment to meet with me to discuss your SDS-approved accommodations.

### **Schedule: (Subject to Revision)**

Wk1: Aug 29: **Introduction to Course**

Wk2: Sept 3: **What is Evolution?**

Sober: *Philosophy of Biology*: Chapter 1: 'What is Evolutionary Theory'  
Sections 1.1, 1.3, & 1.5

Sept 5: **What is Fitness?**

Sober: *Philosophy of Biology*: Chapter 3: 'Fitness'  
Sections 3.1 & 3.2

Wk3: Sept 10: **What is Fitness?**

Mills & Beatty 'The Propensity Interpretation of Fitness'

Sept 12: **Fitness, Selection, and Causation**

Sober: *The Nature of Selection*: Chapter 3: 'Survival, Reproduction, Causation'

Wk4: Sept 17: **Fitness, Selection, and Chance**

Sober: *The Nature of Selection*: Chapter 4: 'Chance'

Sept 19: **The Environment**

Brandon: *Adaptation and Environment*: Chapter 2: 'The Concept of Environment in the Theory of Natural Selection'

Wk5: Sept 24: **Fitness, Selection, and Drift are Not Causes**

Matthen & Ariew: 'Two Ways of Thinking about Fitness and Natural Selection'

Sept 26: **Responses**

Rosenberg & Bouchard: 'Matthen and Ariew's Obituary for Fitness: Reports of its Death have been Greatly Exaggerated'

Wk 6: Oct 1: **Responses:**

Shapiro & Sober: 'Epiphenomenalism, the Do's and Don'ts'

Oct 3: **Population-level causes**

Millstein: 'Natural Selection as a Population Level Causal Process'

Wk 7: Oct 8: **Abstraction, Fitness, and Random Genetic Drift**

Pfeifer: 'Why Selection & Drift Might Be Distinct'

Oct 10: **'The Environment' and 'Populations'**

Millstein: 'How the Concept of 'Population' Resolves Concepts of 'Environment'

Wk 8: Oct 15: **Species**

Sterelny & Griffiths: *Sex and Death*: Chapter 9: 'Species'

Oct 17: **Species**

Kitcher: 'Species'

Wk 9: Oct 22: **Species**

Ereshefsky-Species Pluralism and Anti-Realism

Oct 24: **Race**

Andreasen: 'A New Perspective on the Race Debate'

Wk 10: Oct 29: **Race**

Gannett: The Biological Reification of Race

Oct 31: **Race**

Kaplan & Winthers: 'Prisoners of Abstraction?'

Wk 11: Nov 5: **DNA Fingerprinting**

Lewontin & Hartl: 'Population Genetics in Forensic DNA Typing'

Nov 7: **DNA Fingerprinting**

No Reading

Wk 12: Nov 12: **Evolutionary Psychology**

Sterelny & Griffiths: Chapter 13: 'From Sociobiology to Evolutionary Psychology'

Nov 14: **Evolutionary Psychology**

Franks: 'The Role of "The Environment" in Cognitive and Evolutionary Psychology'

Wk 14: Nov 19: **Evolutionary Psychology**

Lewontin: 'The Evolution of Cognition: The Questions We Will Never

Answer'

Nov 21: **Evolutionary Psychology**

Sterelny & Griffiths: Chapter 14: 'A Case Study: Evolutionary Theories of Emotion'

Wk 15: Nov 26: **Evolution & Ethics**

Kitcher: 'Four Ways of Biologizing Ethics'

\*\*\*\*\***Happy Thanksgiving!**\*\*\*\*\*

Wk 16: Dec 3: **Evolution & Ethics**

Sharon Street, 'A Darwinian Dilemma for Realist Theories of Value'

Dec 5: **Evolution & Ethics**

Thomas Nagel, 'Ethics without Biology'

Wk 17: Dec 10: **Evolution & Ethics**

Elliott Sober, 'Prospects for an Evolutionary Ethics'

**Final Essay Due December 14 at 11:59 to Blackboard**