UC Irvine, Winter 2023
Professor Rena Beatrice Goldstein
renag@uci.edu
https://www.faculty.uci.edu/profile.cfm?faculty_id=7106

PHIL 2
Puzzles and Paradoxes

https://canvas.eee.uci.edu/courses/50969

Syllabus Version: January 16, 2023[1]

Course overview: This course is an introduction to philosophy by way of some famous paradoxes that have challenged our understanding of reality throughout history. The study of paradoxes is not the only way to be introduced to philosophy. However, it is a good one. Understanding the paradoxes will require development of the formal tools needed to think systematically, and to comprehend and evaluate arguments and theories. By the same token, analyzing paradoxes will give way to fundamental philosophical questions about the nature of space, time, knowledge, the infinite, truth, and the mind. Hence, this class is an excellent way both to be introduced to the proprietary subject-matters that have occupied philosophers and to practice the transferable skills that an education in philosophy offers. In this class, you will get to know what it feels like to analyze arguments and become more confident in your ability to evaluate and participate in theoretical reasoning, to communicate clearly, and to think deeply. We'll consider problems regarding the nature of space-and-time, the infinite, truth (the Liar's paradox "This claim is false"), mind and brain (Cartesian dualism), and more recent puzzles that have arisen in decision theory and statistics.

Note: This course is 100% online and so you are not required to physically attend class. Yet this class will be both synchronous and asynchronous. Each Tuesday, a video lecture and slides will be posted to Canvas. **On Thursdays, the class will meet on zoom from 3:30pm-4:50pm.** The zoom link is below. Although sections have a timetabled hour attached to them, **students do not need to attend section at the time listed**. Sections will be asynchronous. However, you must attend lectures on Thursdays unless other arrangements with the Professor have been made.

This course will have both **teaching and learning assistants**. Teaching assistants (TAs) are largely responsible for conducting discussion, grading assignments, holding office hours, and providing input into the development of assignments or exams. Learning Assistants (LAs) are

[1] Subject to revision

undergraduate peer educators that work with students in the classroom setting to support and facilitate active learning in courses that are traditionally difficult or have high enrollment. The main responsibility of an LA is to support their professor and TAs by assisting students while they are engaged in active learning. LAs are expected to interact with students to facilitate collaborative activities and discussions. LAs are not expected to be content experts.

Teaching Assistants:

- Sayid Bnefsi, sbnefsi@uci.edu
- Michael Lara, laramj@uci.edu
- Ignacio Perez, jiperezm@uci.edu

Learning Assistants:

- Bilal Isaac Mohammed Abboushi, babboush@uci.edu
- Nathaly Stephanie Bonilla, nathalyb@uci.edu
- Nathaniel O. Edu, nedu@uci.edu
- Christopher George Lanning, lanningc@uci.edu
- Hesen Wang, hesenw@uci.edu

Prerequisites: There are no prerequisites for this course.

Requirements for Philosophy Major/Minor: Philos 2 satisfies a requirement for the B.A. degree in philosophy, the minor in philosophy, and the minor in humanities and law.

General Education Category IV: Philos 2 satisfies the General Education Category IV (Arts and Humanities). General Education Category IV courses expand the student's sense of diverse forms of cultural expression, past and present. Students develop their critical capacity as they discover how meaning is created and experience is variously interpreted.

General Education Category VB: Philos 2 also satisfies the General Education Category for courses in Quantitative, Symbolic, and Computational Reasoning. General Education Category VB focuses on aspects of formal reasoning including symbolic logic, mathematical modeling, and algorithmic reasoning.

General Education Objectives: After completing Philos 2, successful students should be able to do the following:

- Demonstrate knowledge and understanding of how verbal communication is used in philosophy.
- Understand and explain the research methods used in the philosophy and the testing of competing theories.

- Demonstrate imaginative, creative, and reflective abilities by articulating philosophical insights.
- Understand the concept and purpose of formal languages such as propositional and first-order logic.
- Possess an elementary grasp of the power and limits of formal methods.
- Apply formal tools of logic or mathematics to the analysis and evaluation of everyday and/or scientific arguments, texts, and communicative situations.

Phil 2 Learning Outcomes:

- Understand the concept of a formal, theoretical account of some set of phenomena; understand the purposes and uses (explanatory, descriptive, and predictive) of such an account.
- Possess the conceptual means of evaluating, in general, the success (and failure) of formal accounts and a critical vocabulary to articulate the strengths and weaknesses of a given formalism.
- Be able to apply formal tools of philosophy and critical thinking to the analysis and evaluation of arguments, texts, and communicative situations in all contexts (everyday, scientific, etc.).
- Comprehend the research and creative methods used in the formation and assessment of philosophical arguments and theoretical reasoning in general.
- Understand how the formation and interpretation of culture is shaped by philosophical theories, and vice versa.
- Recognize the cultural variations of expressions of philosophical arguments and theories, past and present.

Course Website: All course content will be available via the course website on Canvas. The class is organized in modules (or course topics), with roughly one module for each week of the course. The course materials for each topic include: **content pages**, with written content, recorded videos, and links to readings and other media; **quizzes**, which are based on the content pages; and **discussions**, which will provide opportunities for ongoing interaction with your classmates as well as the teaching and learning assistants. Readings will be accessed on **Perusall**. Students will be required to read each assigned chapter for a minimum of 90 minutes prior to the start of class on Thursday.

Timezone: All the deadlines for this course are for the US west coast, that is Pacific Standard Time.

Internet Access: You are responsible for verifying that internet access at your location is reliable.

User Account: To participate in the online course, you must log in via your UCI user account.

Prerecorded Mini-Lectures: The course has numerous 'mini-lectures,' which consist of short videos featuring the instructor discussing the material covered in that module. There will also be additional mini-lectures in support of the learning objectives of the course, such as mini-lectures on essay writing.

Readings:

You are required to purchase the following textbook on Perusall.

Sorensen, Roy A. *A Brief History of the Paradox: Philosophy and the Labyrinths of the Mind*. Oxford: Oxford University Press, 2003.

Descartes, René, 1596-1650. *Discourse on Method; and, Meditations on First Philosophy*. Indianapolis :Hackett Pub. Co., 1993.

Purchasing the textbook on Perusall grants access to the software that we will be using throughout the course. For all the topics we are covering here, you will find lots of useful additional readings in the two main (and completely free) online philosophy encyclopedias:

Stanford Encyclopedia of Philosophy, http://plato.stanford.edu

Internet Encyclopedia of Philosophy, http://www.iep.utm.edu

While both of these resources are good, the former tends to be superior to the latter. You are expected to read the material carefully and critically.

How to Succeed: To succeed, students must watch the lecture videos, submit weekly questions, submit responses to questions, and complete the final paper assignment.

EEE/Canvas/Perusall: Check the Canvas course website often. The class is organized in modules (or course topics), with roughly two modules for each week of the course. In each module, there are content pages that have written content, recorded videos, PowerPoint slides, and links to readings and other media. All readings will be posted on Perusall. For your discussion questions to be counted, you must access Perusall through Canvas.

Communication: We will send course announcements to the official course mailing list, so you should check your email regularly. Note that this mailing list goes to the email address that the registrar has for you. If you prefer to read your email on another account, you should set your

account to forward your email to your preferred account. To reach the professor and the teaching assistants, please use the email addresses listed above. If you have questions about your grades for your discussion posts or your essays, then in the first instance please contact the teaching assistant assigned to your discussion group.

Quizzes: Each week you will be asked to answer some multiple choice questions about the mini-lectures and the readings for that week.

Small Group Discussion Board Assignments

Readings: Two articles will be assigned for each module. Optional readings will be listed as well.

Discussion Questions (10%): You will generate one substantial question per week for 1 required reading of your choice. This assignment will help you to think critically and generate intellectual curiosity as you complete the assigned readings. **You will post 1 substantial question on Perusall by Tuesday 11:59pm**. There will be no way to make up for the loss of points incurred by missing or late weekly questions. Instructions for generating a substantial question is on the Canvas Course Webpage.

Discussion Answers (10%): You will respond to at least two peers each week by **Thursday 11:59 pm**. To receive full points, you must make a substantive post that incorporates the course material. A substantive post is generally >100 words and introduces a new idea or is a meaningful response to another person's post. When responding to another person's post, please either expand the thought, add additional insights, or respectfully disagree and explain why. Remember that we are after **reasons and arguments**, and not simply the statement of opinions. Instructions for generating a substantial response post is on the Canvas Course Webpage.

Essays: You will write two essays of 1000-1500 words each. You will find a list of essay questions and the relevant deadlines in the appendices below. Both papers will be reviewed by the professor/teaching assistants. **The papers must be submitted to Canvas.** If you have questions about the essays, then please don't hesitate to contact either your TA or myself. We are also willing to give feedback on essay plans (no more than one page), though naturally you will need to do this well in advance of the essay deadline. **Please note that in the interests of fairness, neither I nor the TAs will provide feedback on essay drafts**. Essays don't need to use a particular style of formatting or referencing. All that is important is that they are clearly written throughout (and full references are given somewhere, where appropriate). Note that we give guidance in the course itself in terms of what we are expecting from the essays, so you need to carefully attend to that advice.

Grading: The breakdown for the 100% over the course is as follows:

- Reading assignments: 40%
- First paper: 30%
- Second paper: 30%

Overall grading for the course follows the standard UCI grading scheme:

A+ = 96.5% A = 93.5% A- = 90%
B+ = 86.5% B = 83.5% B- = 80%
C+ = 76.5% C = 73.5% C- = 70%
D+ = 66.5% D = 63.5% D- = 60%
F = Less than 60%

Late Penalties

For all assessed work, for each day, or part of the day, that the assessment is late we will deduct one grade (e.g., a one-day late penalty means that A+ goes down to A, B- goes down C+, and so on). If you have a good excuse for being late—and please note that a good excuse doesn't mean 'I forgot about the deadline', or 'I left it to the very last minute and my computer broke down', and so on—then it is important that you get in touch with both myself and your TA ASAP to explain the situation.

Class Policies

Respect: This class involves significant online discussion of topics on which you and your classmates may have differences of opinion. You may also have opinions that differ from those of the instructors. Please be respectful of classmates, the professor, and teaching assistants at all times.

Academic Honesty: Please familiarize yourself with UC Irvine's academic honesty policy (http://honesty.uci.edu).

Academic Dishonesty; All students are expected to adhere to the UCI Academic Dishonesty Policies. The consequences of academic dishonesty (e.g., course failure and not learning the material) are not worth the small artificial benefits to your grade and the impugning of your character. The penalty for any violation of academic integrity—including but not limited to plagiarism—failure for the course and a letter recording the violation sent to the Associate Dean for Curriculum and Student Services in the School of Humanities. Note that submitting work for assessment that you have previously submitted for assessment is also a case of academic misconduct. If you have questions about what constitutes academic dishonesty, it is always better

to ask than to guess. All students are expected to adhere to the UCI Academic Dishonesty Policies.

Disability Services: There will be accommodations for students eligible for disability services. Contact the Disability Services Center (DSC) and make the appropriate arrangement.

SCHEDULE

Date	Lecture	Readings	Assignments
Week 1 Tuesday Jan. 10 & Thursday, Jan 12	Topic 1: Introducing Philosophy Riddle of Origins; Different Types of Paradox; Logical Argumentation	Sorensen - Preface, Ch. 1	Watch 'Introducing Philosophy' mini-lecture Watch 'Introducing this course' mini-lecture
Week 2 Tuesday, Jan 17 & Thursday, Jan 19	Ancient Puzzles Part 1. Parmenidean Monism and the Problem of Non-Existent Objects Ancient Puzzles Part 2. Zeno's Paradox	Sorensen - Ch. 3 Sorensen - Ch. 4	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz
Week 3 Tuesday, Jan. 24 - Thursday, Jan. 26	Ancient Puzzles Part 3. Meno's Paradox Ancient Puzzles Part 4. The Sorites Paradox	Sorensen - Ch. 5 Optional: Plato's Meno Sorensen - Ch. 7 Optional: Stanford Encyclopedia "Sorites Paradox"	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz
Week 4 Tuesday, Jan. 31 - Thursday, Feb. 2	Early Modern Puzzles Part 1. Descartes' *Meditations*	Descartes - *First Meditation* Descartes - *Second Meditation* Sorensen - Ch. 16 pgs.	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz **Tuesday: Midterm Essay Draft Due** **Thursday: Peer Review Due**

		216-221	
Week 5 Tuesday, Feb. 7 - Thursday, Feb. 9	Early Modern Puzzles Part 2. Kant's Antinomies of Pure Reason	Sorensen - Ch. 20 Optional: Kant - "The Antinomy of Pure Reason" (selection from *Critique of Pure Reason*)	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz **Midterm Essay Due**
Week 6 Tuesday, Feb. 14 - Thursday, Feb. 16	Epistemic Puzzles Part 1. Monty Hall Problem and The Surprise Test Paradox	Sorensen - Ch. 16, pgs. 224-226 Stanford Encyclopedia "Epistemic Paradoxes," section 1 Optional: Quine "On a so-called paradox"	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz
	Epistemic Puzzles Part 2. Lewis Carroll "What the tortoise said to Achilles"	Lewis Carroll "What the tortoise said to Achilles" Optional: Lewis Carroll "A Logical Paradox	
Week 7 Tuesday, Feb. 21 - Thursday, Feb. 23	Metaphysical Puzzles Part 1. McTaggart and the Unreality of Time	McTaggart - The Unreality of Time Stanford Encyclopedia Sections 5-7 of "Time" Optional: Being and Becoming in Modern Physics	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz
	Metaphysical Puzzles Part 2. Presentism, Possibilism, Eternalism		
Week 8 Tuesday, Feb. 28 - Thursday, March 2	Logical Puzzles Part 1. Cantor's Set Theory	Sorensen - Ch. 22 Optional: Stanford Encyclopedia, Russell's Paradox	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz
	Logical Puzzles Part 2. Russell-Zermelo Paradox		
Week 9 Tuesday,	Decision Theory Paradoxes Part 1	Kornhauser and Sager "Unpacking the Court"	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2

March 7 - Thursday, March 9	Social Choice	Optional: Stanford Encyclopedia "Social Choice Theory"	peers, quiz
	Decision Theory Paradoxes Part 2 Rational Choice	Sorensen - Ch 16, pgs. 232-234 St. Petersburg Paradox	
Week 10 Tuesday, March 14 - Thursday, March 16	Statistical Puzzles Part 1 The Muddy Children Puzzle	Fagin et. al, *Reasoning About Knowledge*, section 1.1	Watch mini-lectures, Perusall reading: 1 substantial question, respond to 2 peers, quiz **Tuesday: Final Essay Draft Due** **Thursday: Peer Review Due**
	Statistical Puzzles Part 2 Simpson's Paradox	Simpson's Paradox in COVID-19 Case Fatality Rates: A Mediation Analysis of Age-Related Causal Effects Optional: Simpson's Paradox in Stanford Encyclopedia	
Week 11 Finals Week	No readings	No lecture	**Final Essay Due**