

Lu Chen

## HUMS XXX *Places and Times*

Fall 2020 Syllabus

*Course Description:* What is the nature of space and time? They are not as abstract as numbers and sets, but they are not as tangible as concrete objects like tables and chairs. Are they real or projections of the human mind? In this course, we will take a journey from Plato to Einstein, from the western world to the east, and from science to art to see how various views about space and time emerge, evolve, and co-exist. We will especially learn to think of space rigorously.

*Course Goals:* (1) enjoy thinking about space and time, two of the most elusive entities; (2) broaden cultural and philosophical horizons; learn classic work in the field; (3) improve transferable skills, such as reading, writing, collaboration, and public speaking.

Tentative reading schedule:

Preparation		Week 1	Course Overview Critical thinking in Philosophy
Space and Time in Science (Part I)	Ancient Greece: the puzzle of space and geometry	Week 2	Reading and writing philosophy Plato <i>Timaeus</i> : 50b-53. (Optional) Euclid <i>Elements</i> : pp.1-2.
		Week 3	Plato <i>Parmenides</i> : 127b-128e. Aristotle and Simplicius on Zeno's paradoxes (excerpts, 6 pages)
		Week 4	Aristotle <i>Physics</i> : 208a26-213a5. <i>First Paper is due.</i>
	Ancient India	Week 5	Duquette, J. and Ramasubramanian, K. "Śrīharṣa on the Indefinability of Time": 43-57.
	Ancient China	Week 6	Neville, R.C. "Space, Time, and Eternity": 438-53.
Space and Time in Art (Part I)		Week 7	No reading. Still Life in Renaissance; Chinese narrative paintings.
Space and Time in Science (Part II)	Relationalism vs Absolutism in the modern era	Week 8	Newton <i>Principia</i> : pp. 6-14.
		Week 9	Leibniz <i>Leibniz-Clarke correspondences</i> (excerpts)
	Week 10	Kant "Concerning the Ultimate Foundation of Differentiation of Regions in Space": pp.36-43.	
	Space and Time in the twentieth century	Week 11	Poincare "Space and Geometry" (6 pages). (Optional) Einstein "The Problem of Space, Ether, and the Field in Physics" (8 pages). <i>Second Paper is due.</i>
Space and Time in Art Part II		Week 12	No reading. Still life in the twentieth century
Wrapping up		Week 13	<i>Creative project is due</i> Student work showcase

## Requirements:

20% Attendance and Participation, 20% Two reading summaries, 40% Two short papers, 20% creative project and showcase.

For a typical week, I will assign an excerpt from a paper or book. Reading before class is mandatory and is important for good discussion. As a fair warning, the classic texts will be hard and challenging (despite their relatively short lengths)! Nonetheless, they are the work of some of our best thinkers, so it will be particularly rewarding to understand them and assimilate them into our own thinking. But if for some reason you cannot finish the assigned reading for a class, no need to panic or skip the class. Just read what you can and reflect on that part. Participation in class is important. You can find some guidance online on discussion such as <https://www.keithbuhler.com/discussion101> and <http://www.keithbuhler.com/participation>.

Reading summaries (1 page, double spacing) are due before the class in which we discuss the reading. The purpose of them is for you to practice your independent reading skill (and effective writing) as well as preparing you for the class. You are only required to do two summaries on readings of your choice during the semester. You may pick the readings that interest you the most or that you understand well. To prepare you for this task, I will talk about how to read and summarize a philosophical paper at the beginning of the semester. Each summary is worth 10% of your course grade. (Scores: 9-10: very good. 7-8: good, with a few issues to fix. 6 or less: you can do better!)

I will give two specific paper assignments (3-5 pages, double spacing) during the semester, which aim to help you improve and solidify your understanding of the course material as well as your writing skill. You can find the tentative due dates in the reading schedule. The questions will be posted one week before the assignment is due. To prepare you for this task, I will talk about how to write a philosophical paper at the beginning of the semester. (Scores: 18-20: very good; 15-17: good; 14 or less: there is substantial room for improvement—for example—in how you structure the paper or how you understand the material.)

While doing the writing assignments trains your critical thinking skill, I also would like you to practice creative and divergent thinking! The creative project is designed for that purpose. You can pick any project that is related to our course material, and helps you think and enjoy thinking about space and time. It can be a play, a song, a craft, an animation, a survey, an experiment, a game, etc. You are highly encouraged to collaborate with others (with maximally two other people). If you do collaborate, there should be a document listing every team member's contribution. Unless there is a substantial disparity in contribution, all members in the same team will get the same score. In the last week of the semester, each team is required to do a short presentation (5 minutes, longer or short depending on the size of the team and the total number of teams) to explain their project and how it relates to the course material.