SPACE AND TIME

PHIL 6720x4140
Winter 2018
Wednesday 11:30 – 2:20
MCKN 316

Instructor: Andrew Wayne
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Course Outline

This course surveys the development of our philosophical and scientific understanding of space and time from the ancient Greeks to the present day. We begin with Plato and Euclid. We then focus on the early modern debate about the reality of space in the work of Descartes, Newton, Leibniz, and Kant. We look at the revolutionary impact of relationalist (Mach), conventionalist (Poincaré) and logical positivist (Reichenbach) accounts of space and time in the 19th and 20th centuries. The final section of the course briefly introduces key issues in the philosophy of time: the direction of time; Husserl's account of the temporal characteristics of experience; and Dainton's attempt to reconcile the experience of the passage of time with current spacetime theory in physics.

Texts and Course Materials

- Nick Huggett, *Space from Zeno to Einstein* (MIT Press, 1999)
- Online materials at http://courselink.uoguelph.ca. You are responsible for accessing CourseLink regularly. Some course materials and grading comments may only be available on CourseLink.

Course Requirements

10% Best 10 weekly reading responses
10% Class participation
20% Presentation
60% Three synthesis papers, each 1,400 to 1,700 words (UG) or 1,800 to 2,100 words (graduate), each worth 20%

Reading responses are due at 10:30 am before each Wednesday class, submitted via CourseLink. They should be 300-400 words in length, and should synthesize and present one to three main points of the reading for the week. Each reading response should end with a good question about the reading. Each satisfactory reading response adds 1 percentage point to your final grade, up to a maximum of 10 points (late responses not accepted). Additional in-class exercises may also be a part of this component of your grade.

Additional support

Students with special needs or requiring additional support are encouraged to speak with me as early in the term as possible to ensure that appropriate arrangements are made.

College of Arts Policy Statements

Please see:
https://www.uoguelph.ca/arts/sites/uoguelph.ca.arts/files/public/COA%20Course%20Outline%20Statements%20W18.docx

Tentative schedule

Week	Topic	Required reading	Presenter
1. Introduction			
Jan. 10	Plato	Huggett, Ch. 1	
Jan. 17	Euclid & non-Euclidean geometry	Huggett, Ch. 2 and pp. 226-233	
2. Substantivalism and relationalism			
Jan. 24	Descartes and Newton	Huggett, Chs. 6 and 7	
Jan. 31	Leibniz and Clarke	Huggett, Ch. 8	
Feb. 7	Leibniz and Sklar	Sklar, pp. 167-181 and 229-234	
Feb. 14	Berkeley and Mach	Huggett, Ch. 9	
3. Kant and conventionalism			
Feb. 28	Kant	Huggett, Ch. 12 *Paper #1 due Mar. 2*	
Mar. 7	Poincaré	Huggett, Ch. 13	
Mar. 14	Reichenbach and alternatives	Sklar, pp. 94-101 and 113-122	
4. Time and temporal experience			
Mar. 21	The direction of time and the "moving now"	Horwich, pp. 15-33 *Paper #2 due Mar. 23*	
Mar. 28	Husserl on the temporal character of experience	Miller	
Apr. 4	The experience of time in the block universe	Dainton *Paper #3 due Apr. 11*	

References

Dainton, Barry. 2011. "Time, Passage, and Immediate Experience." *The Oxford Handbook of Philosophy of Time*. Craig Callender: Oxford University Press.

Horwich, Paul. 1987. *Asymmetries in Time*. Cambridge MA: MIT Press.

Huggett, Nick, Ed. 1999. *Space from Zeno to Einstein*. Cambridge, MA: MIT Press.

Miller, Izchak. 1982. "Husserl's Account of Our Temporal Awareness." *Husserl, Intentionality, and Cognitive Science*. Hubert L. Dreyfus and Harrison Hall. Cambridge, Mass.: MIT Press**:** 125-146.

Sklar, Lawrence. 1974. *Space, Time, and Spacetime*. Berkeley: University of California Press.