

PHIL/ 686 Philosophy of Space & Time
HPS TTh 2:00–3:15

Fall 2001

Prof. Don Howard
308 Malloy Hall
Tel: 631–7547
Don.A.Howard.43@nd.edu
Office Hours: TTh 1:00–2:00

Texts: Robert Geroch. *General Relativity from A to B*. Chicago: University of Chicago Press, 1981.
Lawrence Sklar. *Space, Time, and Spacetime*. Berkeley: University of California Press, 1977.

Requirements: Each participant in the seminar will be required to make one presentation to the seminar, on a topic to be chosen in consultation with the instructor, and to submit a research paper (minimum 15 pp.) on a topic related to the seminar and, again, chosen in consultation with the instructor.

Schedule:

Date:	Topic:	Readings:
28 Aug.	Introduction: A (Very) Brief Survey of the History of Theories of Space and Time from Antiquity to the Twentieth Century	
30 Aug.		
04 Sep.	The Space-Time Viewpoint	Geroch, chs. 1-4.
06 Sep.		
11 Sep.	A Primer on General Relativity, I	Geroch, chs. 5-6.
13 Sep.		
18 Sep.	A Primer on General Relativity, II	Geroch, chs. 7-8.
20 Sep.		
25 Sep.	The Epistemology of Geometry	Sklar, ch. II.
27 Sep.		
02 Oct.	Absolute Motion and Substantival Spacetime	Sklar, ch. III.
04 Oct.		
09 Oct.	Causal Order and Temporal Order	Sklar, ch. IV.
11 Oct.		

16 Oct.	The Direction of Time	Sklar, ch. V.
18 Oct.		
23, 25 Oct.	<i>Fall Break</i>	
30 Oct.	The Hole and Point-Coincidence Arguments	
01 Nov.	Preparing for Norton's Visit	
06 Nov.	Other Topics and Presentations	
08 Nov.	" " " "	
13 Nov.	Greene: Rea & Balashov	
15 Nov.	Stokes, Helmholtz on the Foundations of Geometry	
20 Nov.	McKaughan, The Hole Argument and Substantivalism	
22 Nov.	<i>Thanksgiving Holiday</i>	
27 Nov.	Slaney, Reichenbach and Friedman	
29 Nov.	Biddle, Reichenbach, Einstein, Particle Indistinguishability, and Covariance	
04 Dec.	" " " "	
06 Dec.	Fogel, Singularities in General Relativity	
11 Dec.	Keller, TBA	
17 Dec.	Term Papers Due (Mon., 5:00 PM)	