HONORS 3900 - Honors Colloquium

The History of Cosmological Thought

Course Outline - Spring Semester 2007

INSTRUCTORS:	Dr. Brad Carroll	Dr. Bob Mondi
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TEXTS:	The Book of the Cosmos,	Imagining the Universe
	from Heraclitus to	<i>Hawing</i> , Dennis Danielson
	(ed.)	
	<i>Biq Banq,</i> Simon Singh	

Science and math background assumed: none!

OUTLINE

Cosmology is the study of the universe on the grandest scale. How did the world come to be, what is it like, and how does it work? We will examine the ideas of western cosmology, from the ideas of the presocratic philosophers to the theories of modern cosmology.

The course will use a seminar format based on the readings assigned for that day. Your grade will be based on your assigned classwork, attendance, and class participation. You should email a list of three questions about the assigned reading before 10 am on class days. A few papers on selected topics will be assigned during the semester. Several short assignments or observing projects will also be required. A final project is required, and must be approved by March 22 by the instructors. You will present your project to the class during the last week of the semester.

OFFICE HOURS

Brad: 10:00 - 11:00 Daily and any other time I am in my office **Bob:** All day

SCHEDULE AND READING ASSIGNMENTS

Week 1

Jan 9 Course introduction 11 Cosmos, #1 - 4, p. 1 - 30

Week 2

Jan 16 Cosmos, #5 & 6, p. 31 - 42 18 Cosmos, #7 - 10, p. 43 - 65; Big Bang, p. 1 - 27

Week 3

Jan	23	St. Aug	ustine,	Сог	nfes	ssic	ns	s, Boo	ok XI	Γ				
	25	Cosmos,	#11 -	17,	p.	68	-	101;	Big	Bang,	p.	28	-	33

Week 4

Jan	30	Cosmos,	#18	-	20,	p.	104	-	127
Feb	1	Cosmos,	#21	_	23,	p.	128	_	144

Week 5

Feb 6 Cosmos, #24 & 25, p. 145 - 162; Galileo, Letter to the Grand Duchess Christina 8 Cosmos, #26, p. 163 - 172; Big Bang, p. 47 - 75

Week 6

Feb 13 Cosmos, #27 - 33, p. 173 - 219 15 Cosmos, #34, p. 220 - 228

Week 7

Feb 20 Cosmos, #35 - 40, p. 229 - 258 22 Cosmos, #41 - 43, p. 259 - 276; Big Bang, p. 75 - 83

Week 8

Feb 27 *Big Bang*, p. 85 - 116; *Cosmos*, #59, p. 366 - 370 March 1 *Big Bang*, p. 116 - 143

Week 9

March 6 Cosmos, #58, 60, 63, p. 356 - 365, 371 - 379, 390 - 393 8 Big Bang, p. 144 - 163

- March 13 Spring
 - 15 **Break**

Week 10

March 20 Big Bang, p. 165 - 229

22 Cosmos, #44 - 46, 48 - 50, 53, p. 277 - 293, 298 - 311, 326 - 332

Week 11

March 27 Big Bang, p. 229 - 263; Cosmos, #52, 61, 62, 64, p. 317 - 325, 380 - 389, 394 - 400 29 Big Bang, p. 265 - 355; Cosmos, #67, p. 411 - 415

Week 12

April 3 Big Bang, p. 357 - 437; Cosmos #72, 74, p. 433 - 437, 448 - 451 5 Big Bang, p. 437 - 463, Cosmos #47, 76, p. 294 - 297, 460 - 463

Week 13

April 10 Alpha and Omega, Ch. 5, p. 63 - 89 12 Big Bang, p. 469 - 493; Cosmos #73, 79, 81, p. 438 - 447, 482 - 487, 498 - 505

Week 14

April 17 Cosmos, #77, 78, 83, 84, 85, p. 464 - 481, 510 - 528; Weinberg, A Designer Universe? 19 Course wrap-up

Week 15

- April 24 Presentation of course projects
 - 26 Presentation of course projects