

Astronomy 104

Our Exploration of the Solar System

Spring 2004
MW 9:55 3425 Sterling

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1/21 Overview of our Place in the Universe BSNV Chap. 1

I. The Sky and Celestial Motions

1/26 The Sky; The Motions of the Stars and Moon BSNV Chap. 2.1-2.5
1/28 The Motions of the Sun; Eclipses BSNV Chap. 2.6
2/2 The Motions of the Planets Begin (extensive!) readings in Bless

II. Historical Foundations

2/4 Earliest Ideas Bless, Chaps. 3-4; BNSV 56-70
2/9 Alexandrian School Bless, Chaps. 5-6
2/11 Copernicus, Brahe, and Kepler Bless, pp. 105-127; BNSV 70-73
2/16 Galileo and the Birth of Modern Astronomy Bless, pp. 128-139; BNSV 74-83

III. Newton and Gravity

2/18 The Laws of Motion Bless, pp. 142-150; BNSV 129-138
2/23 The Newtonian Law of Gravity Bless, pp. 150-166; BNSV 138-147
2/25 "... all was light!"

3/1 6-Week Exam (7:15 pm, 3425 Sterling Hall)

IV. Astronautics

3/1 Rockets
3/3 Travel Through the Solar System

V. The Nature of Light

3/8 The Nature of Light BSNV pp. 153-158
3/10 The Origin of Light BSNV pp. 158-168
3/22 Telescopes BSNV Chap. 7

VI. The Sun

3/24	Overview of the Solar System	BSNV Chap. 8
3/29	Formation of the Solar System	BSNV Chap. 9
3/31	From Nuclear Fusion to Sunlight	BSNV Chap 15
4/5	The Sun's "Surface" and Space Weather	

VII. The Planets and Companions

4/7	Terrestrial Planets – Geology	BSNV Chap. 10
4/12	Terrestrial Planets – Atmospheres	BSNV Chap. 11

4/12 ***12-Week Exam (7:15 pm, 3425 Sterling Hall)***

4/14	Terrestrial Planets – Evolution	
4/19	Jovian Planets	BSNV Chap. 12.1-12.4
4/21	Jovian Satellites and Rings	BSNV Chap. 12.5-12.6
4/26	Vagabonds of the Solar System	BSNV Chap. 13
4/28	Beyond our Solar System – Exoplanets	BSNV 9.6

VIII. Return to Earth and the Origin of Our Life

5/3	What Makes the Earth special?	BSNV Chap. 14
5/5	The Origin of Life	

5/9 **Final Exam** **12:25 pm**

“BSNV” = Bennett, Donahue, Schneider and Voit, *The Solar System: The Cosmic Perspective*

“Bless” = Bless, *Discovering the Cosmos* (copy)