

Astronomy 1102/1104

Lecture Outline for Exam 1

9 February, 2009

Lectures as given

Lect.	Date	Topic	Material covered (see outline below)
1	19 Jan	Intro	0.1.-0.3.
2	21 Jan	Intro	1.1.
3	23 Jan	I.01	1.2.1.
4	26 Jan	I.02	1.2.2.-1.2.4.
5	28 Jan	I.03	1.3.1.
6	30 Jan	I.04	1.3.2.-1.3.6.
7	2 Feb	I.05	1.3.7. 1.4.
8	4 Feb	I.06	1.5.
9	6 Feb	I.07	1.6. 1.7.1.-1.7.4.
10	9 Feb	I.08	1.7.5. 1.8.1.-1.8.3.
11	11 Feb	I.09	1.8.4. 1.9.
12	13 Feb	I.10	Review
13	16 Feb	Exam 1	Intro and Unit I

Outline

- 0. Introduction
 - 0.1. The Course
 - 0.2. The Subject
 - 0.3. The Grand Tour
- 1. The Birth of Astronomy
 - 1.1. How Science Works
 - 1. Introduction
 - 2. The Scientific Method
 - 3. Astronomy Funding
 - 4. The (Very) Big Picture
 - 1.2. The Celestial Sphere
 - 1. Celestial Motions
 - 2. Timekeeping
 - 3. The Appearance of the Skies
 - 4. The Motions of the Planets
 - 1.3. Ancient Astronomy
 - 1. Overview from Pythagoras to the Middle Ages
 - 2. The Role of Astronomy
 - 3. Mesopotamia
 - 4. From Thales to Aristotle
 - 5. The Alexandrian School
 - 6. Hipparchus
 - 7. Ptolemy
 - 1.4. The European Dark Ages
 - 1. The Fall of Rome
 - 2. Science in the Dark Ages
 - 3. Moslem Astronomy
 - 4. The Rise of Scholasticism
 - 5. The Roots of the Renaissance
- 1.5. The Copernican Revolution
 - 1. Background
 - 2. Nicholas Copernicus
 - 3. The Heliocentric Model of Copernicus
 - 4. Tycho Brahe
- 1.6. Johannes Kepler
 - 1. Biography
 - 2. Kepler's Laws
 - 3. Measuring the AU
- 1.7. Galileo Galilei
 - 1. Biography
 - 2. Observations
 - 3. Galileo, Physics, and Science
 - 4. Galileo and the Church
 - 5. Overview
- 1.8. Isaac Newton
 - 1. Background
 - 2. Biography
 - 3. Newton's Three Laws of Motion
 - 4. The Universal Law of Gravitation
- 1.9. The Scientific Method
 - 1. Halley's Comet
 - 2. Uranus and Neptune
 - 3. Pluto
 - 4. Historical Review