

Physics 174
Lecture Outline for Exam II

1 December, 2006

Lectures as given

Lect.	Date	Topic	Material covered (see outline below)
22	23 Oct	III.01	3.1.
23	25 Oct	III.02	3.2.1.–3.2.2.
24	27 Oct	III.03	3.2.2.
25	30 Oct	III.04	3.2.2.–3.2.3.
26	1 Nov	III.05	3.2.4.
27	3 Nov	III.06	3.2.4.–3.2.5.
28	6 Nov	III.07	3.2.5.–3.2.6.
29	8 Nov	III.08	3.2.6. 3.3.1.–3.3.2.
30	10 Nov	III.09	3.3.3.–3.3.7. 3.4.1.–3.4.2.
31	13 Nov	III.10	3.4.2.–3.4.4.
32	15 Nov	III.11	3.4.4. 3.5.1.–3.5.2.
33	17 Nov	III.12	3.5.2.–3.5.3.
34	27 Nov	III.13	3.5.4.–3.5.6.
35	29 Nov	III.14	3.5.6.–3.5.7. 3.6.
36	1 Dec	III.15	3.7.
37	4 Dec	III Review	
38	6 Dec	Exam II	

Outline

3. Modern Planetary Astronomy

3.1. Overview

1. The whole point
2. Introductory slideshow
3. Quick inventory
4. Key properties of the Solar System
5. Some definitions

3.2. The terrestrial worlds

1. Global properties
2. Surface geology
3. Interiors
4. Atmospheres
5. Life and water on Mars
6. Climatology on Earth

Outline (continued)

3.3. Asteroids

1. The Bode-Titius Relation
2. Discoveries
3. Locations of asteroids
4. Kirkwood Gaps
5. Impacts
6. Types of asteroids
7. Asteroids up close

3.4. The jovian worlds

1. Overview
2. Atmospheres
3. Internal structure
4. Ring systems

3.5. The outer icy worlds

1. Overview
2. The Galilean System
3. The other moons of Jupiter
4. The moons of Saturn
5. The moons of Uranus
6. The moons of Neptune
7. Trans-Neptunian Objects

3.6. The outer Solar System

1. Comets
2. The Oort Cloud
3. Meteors

3.7. Formation of the Solar System

1. Three major models
2. The accretion model
3. Observational evidence
4. Composition and mass
5. The Galilean System
6. Other moon systems