

Physics 174
Lecture Outline for Exam II

23 March, 2007

Lectures as given

Lect.	Date	Topic	Material covered (see outline below)
15	23 Feb	II.01	2.1.
16	26 Feb	II.02	2.2.-2.3.
17	28 Feb	II.03	2.4.
18	2 Mar	II.04	2.5.
19	5 Mar	III.01	3.1.
20	7 Mar	III.02	3.2.1. 3.2.2.
21	9 Mar	III.03	3.2.2.
22	19 Mar	III.04	3.2.3. 3.2.4.
23	21 Mar	III.05	3.2.4. 3.2.5.
24	23 Mar	III.06	3.2.5. 3.2.6.
25	26 Mar	III.07	3.2.7.
26	28 Mar	III.08	review

Outline

2. Light

2.1. The Spectrum

1. Electromagnetic radiation
2. Electromagnetic waves
3. The electromagnetic spectrum
4. The Correspondence Principle

2.2. Optics

1. Reflection
2. Refraction
3. Diffraction

2.3. Telescopes

1. Refracting
2. Reflecting
3. New frontiers

2.4. Photometry

1. Blackbody radiation
2. Brightness and distance
3. Albedo

2.5. Spectroscopy

1. Bohr model
2. Kirchhoff's Laws
3. Reality
4. Doppler shifts

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 on Earth
6. Climatology on Earth
7. Life on Mars