Lectures as given

<table>
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<th>Lect.</th>
<th>Date</th>
<th>Topic</th>
<th>Material covered (see outline below)</th>
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<td>Intro</td>
<td>0.1. - 0.3.</td>
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<td>2</td>
<td>24 Jan</td>
<td>Intro</td>
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<td>3</td>
<td>26 Jan</td>
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<td>5 Feb</td>
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<td>9 Feb</td>
<td>I.07</td>
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<td>I.08</td>
<td>1.8.1.-1.8.3.</td>
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<td>16 Feb</td>
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<td>19 Feb</td>
<td>I.11</td>
<td>1.11 (and 9 pm Review)</td>
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<td>21 Feb</td>
<td>Exam 1</td>
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Outline

0. Introduction

0.1. The course
0.2. The subject
0.3. The Grand Tour
0.4. Science
0.5. The Meaning of Measure

1. The Birth of Astronomy

1.1. Ancient astronomy
   1. Civilization and towns
   2. Needs for astronomy
   3. Sun
   4. Stars
   5. Planets
   6. Precession

1.2. Egypt
   1. Historical sketch
   2. Early Egyptian cosmology
   3. Sirius and the Nile
   4. Calendar

1.3. Mesopotamia
   1. Historical background
   2. Religion and cosmology
   3. Babylonian astronomy
   4. Astrology
   5. Conclusions
Outline (continued)

1.4. Ancient Greece
   1. The Setting
   2. The Milesian School
   3. The Pythagoreans
   4. The Rationalists
   5. The Greek mind

1.5. The Celestial Sphere Model
   1. Physical solution
   2. Coordinates
   3. Motion of the Sun
   4. Motion of the Moon
   5. Motion of the other planets
   6. Time

1.6. Classical Greece
   1. Socrates and Plato
   2. Eudoxan spheres
   3. Aristotle
   4. The Alexandrian School
   5. Hipparchus
   6. Ptolemy

1.7. The 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

1.8. The Copernican Revolution
   1. Nicholas Copernicus
   2. The heliocentric model of Copernicus
   3. The reaction

1.9. Galileo
   1. Background
   2. Physics
   3. The telescope
   4. The trial of Galileo

1.10. Kepler
   1. Background
   2. Tycho Brahe
   3. Kepler’s method
   4. Kepler’s Laws
   5. Consequences

1.11. Newton
   1. Background
   2. Isaac Newton’s life in review
   3. Newton’s Three Laws of Motion
   4. The Law of Universal Gravitation