Astronomy of the Solar System

PHYS 1304   Summer I 2019

Instructor Information

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Class Description

Physics 1304, Astronomy of the Solar System, is a three credit hour introductory study of the current knowledge and techniques of planetary astronomy. Broad topics in the field will be covered, but the emphasis will be on the birth of modern planetary astronomy and planetary geology.

Learning Objectives

After completing the Astronomy of the Solar System course, you should be able to comprehend, apply, and analyze the most important scientific models governing modern solar system astronomy and planetary geology and be familiar with the properties of the planets and smaller members of the solar system studied by planetary astronomers. Also, you should be able to comprehend, apply, and analyze the practices and methodologies used by modern astronomers in constructing planetary models.

Textbook

Primary Textbook (AS):

https://openstax.org/details/books/astronomy

Secondary Textbook (PG):

https://opentextbc.ca/geology/
Late Work Policy

- Unexcused late work or missed tests will not be accepted.
- If your assignments are not submitted by the posted deadline you will receive a zero for that assignment.
- You must contact your professor before the assignment is due if you believe it will be late or as soon as possible after the due date in the case of an unexpected emergency.
- Blackboard issues will arise, if you wait until the last minute to complete assignments you run the risk of missing them. I can fix problems such as browser crashes and internet outages, but NOT the hour before it is due. You have an entire week to complete work, so due dates are firm.

Class Work and Assessments

Quizzes Each chapter that we cover will be given a quiz. Quizzes for chapters assigned each week are all due on Friday (except for the last week, which is due Wednesday).

Unit Tests There will be four Unit tests worth 40 points each, due on Sunday of each of the first four weeks.

Final Exam There will be a Final Exam worth 100 points due on July 3.

Grading

Your final grade will be determined by your scores on all tests and exams.

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<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>40 %</td>
<td>Fridays</td>
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<tr>
<td>Unit Tests</td>
<td>40 %</td>
<td>Sundays</td>
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<tr>
<td>Final Exam</td>
<td>20 %</td>
<td>July 3</td>
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TOTAL 100 %

Angelo State University employs a letter grade system. Grades in this course are determined on a percentage scale:

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = 59% and below
Course Schedule

NOTE:

- EOD (end of the day) means 11:59 PM
- AS = OpenStax Astronomy Book
- PG = Physical Geology Book

### Week 1 (June 3 - 9)

| AS Chapter 1 | Science and the Universe: A Brief Tour |
| AS Chapter 2 | Patterns in the Sky Motions of Earth and the Moon |
| AS Chapter 3 | Motion of Astronomical Bodies |
| AS Chapter 4 | Gravity and Orbits |

Due Dates:

| Chapter Quizzes | EOD June 7 |
| Unit Test #1    | EOD June 9 |

### Week 2 (June 10 - 16)

| PG Chapter 1 | Introduction to Geology Sections: 1.4, 1.5 |
| PG Chapter 3 | Intrusive Igneous Rocks Sections: 3.1 |
| PG Chapter 4 | Volcanism Sections: 4.1, 4.2, 4.3 |
| PG Chapter 5 | Weathering and Soil Sections: 5.1, 5.2, 5.6 |
| PG Chapter 8 | Measuring Geological Time Sections: All |
| PG Chapter 9 | Earth’s Interior Sections: All |
| PG Chapter 10 | Plate Tectonics Sections: All |
| PG Chapter 11 | Earthquakes Sections: 11.1, 11.2, 11.3 |

Due Dates:

| Chapter Quizzes | EOD June 14 |
| Unit Test #2    | EOD June 16 |

### Week 3 (June 17 - 23)

| AS Chapter 7 | Other Worlds: An Introduction to the Solar System |
| AS Chapter 9 | Cratered Worlds |
| AS Chapter 10| Earthlike Planets: Venus and Mars |

Due Dates:

| Chapter Quizzes | EOD June 21 |
| Unit Test #3    | EOD June 23 |
Week 4 (June 24 - 30)

AS Chapter 11  The Giant Planets
AS Chapter 12  Rings, Moons, and Pluto
AS Chapter 13  Comets and Asteroids: Debris of the Solar System

Due Dates:
Chapter Quizzes  EOD June 28
Unit Test #4  EOD June 30

Week 5 (July 1 - 3)

AS Chapter 30  Life in the Universe

Due Dates:
Chapter 24 Quiz  EOD July 3
Final Exam  EOD July 3

Academic Integrity

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

American Disability Act

Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request and to implement academic accommodations.

Religious Holy Day

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.