Solar System Astronomy Lab

PHYS 1104           Summer I 2019

Instructor Information

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Office: Vincent 123
Office Hours: Available via Email
Office Phone: (325) 486-6787

Class Description

Physics 1104, Solar System Astronomy Laboratory, is a one 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 planetary astronomy and planetary geology.

Learning Objectives

After completing the Solar System Astronomy Laboratory course, you should be able to apply the scientific method used by scientists as you complete simulated astronomical observations using Starry Night College software. Furthermore, you should be able to apply the processes, practices, and methodologies used by modern astronomers in constructing astrophysical models.

Textbook


This workbook comes with a download code for the Starry Night College software. Both the software and workbook are required for this course. Starry Night College is a realistic and user-friendly planetarium simulation program that is designed to allow you to perform observational activities on your computer.

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.
Grade Determination

Your final grade will be determined by your scores on all lab tests. There are 14 tests worth 25 points each giving a total of 350 possible points. An extra credit lab will also be available to help raise your grade.

Final course grades will also be determined in part based on attendance as follows:

<table>
<thead>
<tr>
<th>Number of Absences</th>
<th>Highest Possible Grade %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>90 % (A)</td>
</tr>
<tr>
<td>3-4</td>
<td>80 % (B)</td>
</tr>
<tr>
<td>5-6</td>
<td>70 % (C)</td>
</tr>
<tr>
<td>7-8</td>
<td>60 % (D)</td>
</tr>
<tr>
<td>9+</td>
<td>50 % (F)</td>
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Course Schedule

NOTE:

• EOD (end of the day) means 11:59 PM

Week 1 (June 3 - 9)

Lab 1 STARRY NIGHT TUTORIAL
Lab 2 A1, A2, A3, A4, A5
Lab 3 A6, A7, A8, A9, A13

Due Dates:
Lab Quizzes EOD June 9

Week 2 (June 10 - 16)

Lab 4 PRECESSION
Lab 5 A10, A11, A12
Lab 6 B1, B2, B3, B4, B5
Lab 7 FLYING TO MARS

Due Dates:
Lab Quizzes EOD June 16

Week 3 (June 17 - 23)

Lab 8 B6, C1, C2, C4, C5
Lab 9 MOONS OF JUPITER
Lab 10 THE RINGS OF SATURN

Due Dates:
Lab Quizzes EOD June 23
Week 4 (June 24 - 30)

| Lab 11 | D1, D2, D3, D4 |
| Lab 12 | PLUTO AND KUIPER BELT OBJECTS |
| Lab 13 | ASTEROIDS |
| Lab 14 | MOTION OF THE SUN ALONG THE ECLIPTIC |

Due Dates:

Lab Quizzes  EOD June 30

Week 5 (July 1 - 3)

| Lab 15 | (EXTRA CREDIT) THE CELESTIAL SPHERE |

Due Dates:

Lab Quiz  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.