Instructor Information

Name: Dr. Justin Bankert  
Email: jbankert@angelo.edu  
Office: Vincent 123  
Office Hours: Tuesday, Thursday: 9:00 AM - 11:00 AM and 1:00 PM - 3:00 PM  
Office Phone: (325) 486-6787

Class Times and Locations

Room: ASU Planetarium (VIN P-02)  
Times: Tuesday; 3:00 PM - 4:50 PM

Class Overview and Goals

Physics 1103, Stellar Astronomy Laboratory, is a one credit hour introductory study of the current knowledge and techniques of astronomy and astrophysics. Broad topics in the field will be covered, but the emphasis will be on stellar astronomy and cosmology.

There are two general goals for Physics 1103.

1. After completing the Stellar 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.

2. After completing the Stellar Astronomy Laboratory course, 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.
Course Administration

- Class attendance is both an ASU and course requirement.
- You are expected to attend all scheduled class meetings.
- You are responsible for all course material and information that is presented in class.
- Attendance will be taken for each class meeting.
- Students will initial the sign-in sheet for each class attended.
- If you miss class, get the class notes and information from a fellow student.
- Attendance (or lack thereof) often makes a difference in your success in this class.
- ANY STUDENT CAUGHT SIGNING IN FOR ANOTHER STUDENT WILL RESULT IN ALL PARTIES BEING DROPPED 1 (ONE) LETTER GRADE.

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>
</tr>
</tbody>
</table>

Getting Started

- Download Starry Night College software onto your computer. The software download instructions are given on the inside cover of your Starry Night Workbook.
- Alternatively, you can also access Starry Night College in the MCS 111 computer lab (computers 10-44), but you will still need to purchase the Starry Night Workbook to have access to the Student Exercise instructions and answer sheets.
- Make sure you read the Preface (p. vii) and Quick Tips (p. ix) in the workbook.
Weekly Lab Assignment Action Plan

Follow this plan as you work your way through each lab assignment:

1. Labs will be assigned during our class time (Tuesday at 3 PM) and are due the following Sunday at 11:59 pm. I will give you pre-lab instructions in class. This usually takes 30 minutes or less.

2. Go to the site that you choose to complete this lab (either the MCS 111 computer lab or use your personal computer).

3. Follow the instructions (LAB INSTRUCTIONS tab in Blackboard) for each lab carefully and fully.

4. Do each lab as assigned (see lab assignment schedule below), answering all the questions and/or recording data on the Starry Night Workbook answer sheet or on the Starry Night Work Sheets (available on our Blackboard site).

5. I recommend that you do the labs on the day they are assigned, since you will already have a two-hour block of time built into your schedule for this class.

6. After you complete the lab, take the Blackboard lab quiz (look in the LAB TESTS tab).

7. Make sure you submit the test when you complete it and that you meet the deadline for submission for the test.

8. You can use your completed workbook answer sheet pages or work sheets to help you while taking the test.

9. You do not have to turn in the answer sheet from the Starry Night Workbook or the work sheets.

10. Grades will be reported in Blackboard (Tools/My Grades).

Lab Schedule (Tests are due at 11:59 PM and must be started by 11:30 PM the Sunday after they are assigned)

<table>
<thead>
<tr>
<th>Week of January 14</th>
<th>Lab 1</th>
<th>Starry Night Tutorial (Due January 27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week of January 21</td>
<td>Lab 2</td>
<td>Starry Night Student Exercises E1, E2, E3, E4</td>
</tr>
<tr>
<td>Week of January 28</td>
<td>Lab 3</td>
<td>Starry Night Student Exercises B3, B4, B5</td>
</tr>
<tr>
<td>Week of February 4</td>
<td>Lab 4</td>
<td>Starry Night Student Exercises F1, F2, F3, F4, F5</td>
</tr>
<tr>
<td>Week of February 11</td>
<td>Lab 5</td>
<td>The Magnitude Scale and Distances (pg 67 in workbook)</td>
</tr>
<tr>
<td>Week of February 18</td>
<td>Lab 6</td>
<td>Stars and the HR Diagram (pg 71 in workbook)</td>
</tr>
<tr>
<td>Week of February 25</td>
<td>Lab 7</td>
<td>Nebulae: The Birth and Death of Stars (pg 75 in workbook)</td>
</tr>
<tr>
<td>Week of March 4</td>
<td>Lab 8</td>
<td>Pulsars and Supernova Remnants (pg 79 in workbook)</td>
</tr>
<tr>
<td>Week of March 11</td>
<td>None</td>
<td>Spring Break</td>
</tr>
<tr>
<td>Week of March 18</td>
<td>Lab 9</td>
<td>Starry Night Student Exercises F6, F7, F8</td>
</tr>
<tr>
<td>Week of March 25</td>
<td>Lab 10</td>
<td>Starry Night Student Exercises G1, G2, G3, G4</td>
</tr>
<tr>
<td>Week of April 1</td>
<td>Lab 11</td>
<td>Quasars and Active Galaxies (pg 87 in workbook)</td>
</tr>
<tr>
<td>Week of April 8</td>
<td>Lab 12</td>
<td>Views of the Milky Way (pg 91 in workbook)</td>
</tr>
<tr>
<td>Week of April 15</td>
<td>Lab 13</td>
<td>Globular Clusters (pg 95 in workbook)</td>
</tr>
<tr>
<td>Week of April 22</td>
<td>Lab 14</td>
<td>The Neighborhood of the Sun (pg 99 in workbook)</td>
</tr>
<tr>
<td>Week of April 29</td>
<td>Lab 15</td>
<td>Beyond the Milky Way Galaxy (pg 103 in workbook)</td>
</tr>
</tbody>
</table>
Planetarium Class Etiquette

- No food, drinks, or tobacco products are allowed in the planetarium or outer lobby area.
- Please do not leave trash in the planetarium or lobby.
- Please do not disturb fellow students during class time.
- Please do not put your feet up on the chair in front of you.
- Silence cell phones and other electronic devices.
- No texting/messaging during class.
- Please let me know if you will be using any electronic device during class.

Student Disability Services

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA), and subsequent legislation.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the students responsibility to initiate such a request by contacting Ms. Dallas A. Swafford, Director of Student Disability Services; dallas.swafford@angelo.edu

Title IX

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASUs Title IX Coordinator: Michelle Nicole Boone, J.D. Director of Title IX Compliance; michelle.boone@angelo.edu

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep
you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

**Academic Integrity**

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the Statement of Academic Integrity

**Plagiarism**

Plagiarism is a serious topic covered in ASUs Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone elses work, idea, etc., and passing it off as ones own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

**Copyright Policy**

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

**General Policies**

All students are required to follow the policies and procedures presented in these documents: Angelo State University Student Handbook, Angelo State University Catalog