ASTRONOMY 105 LABORATORY  
Summer II 2018  
(1:30 -3:20)PM  TWR  Miller Science 318

Supervising Faculty: Dr. Robert Friedfeld  
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Office Rm. 322I or 126 Miller Science Building  
Phone: 468-2197

Office Hours (By appointment) July 10 - Aug.10, 2018
Laboratory Assistant:

CALENDAR

<table>
<thead>
<tr>
<th>Lab</th>
<th>Date</th>
<th>Lab Exercise</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>July 10</td>
<td>No Lab</td>
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<tr>
<td>1</td>
<td>July 11</td>
<td>The Moon</td>
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<tr>
<td>2</td>
<td>July 12</td>
<td>Constellations/Star Charts</td>
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<tr>
<td>3</td>
<td>July 17</td>
<td>Experimental Measurements</td>
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<td>4</td>
<td>July 18</td>
<td>Mercury’s Orbit</td>
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<td>5</td>
<td>July 19</td>
<td>Emission Spectra</td>
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<td>6</td>
<td>July 24</td>
<td>The Earth’s Orbital Velocity</td>
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<td>7</td>
<td>July 25</td>
<td>The HR Diagram</td>
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<tr>
<td>8</td>
<td>July 26</td>
<td>Stellar Parallax/Distance to the Pleiades</td>
</tr>
<tr>
<td>9</td>
<td>July 31</td>
<td>Ages and Distances of Clusters</td>
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| 10  | Aug 01*  | Night Lab at 8:30 p.m. (
| Wed |          | Sky Observations)              |
| 11  | Aug 02   | Hubble’s Law                    |
| 12  | Aug 07   | The Rotation of Saturn/Review for Lab Exam |
|     | Aug 08   | Lab Exam                        |

* Tentative Date: If the weather is cloudy or raining, we will reschedule the night lab.

Night Lab Calendar  
(The night lab will be held at the Observatory)

<table>
<thead>
<tr>
<th>Lab Section</th>
<th>Night Lab</th>
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<tr>
<td>20</td>
<td>Aug 01* (Wednesday)</td>
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OUTDOOR NIGHT LAB

Please read the following night lab guidelines carefully.
1. Night labs will be held on specific dates and times at the SFA Observatory. You are required to attend only one of these labs.
2. On the evening of your night lab, meet at the commuter’s bus stop (located behind the Steen Library) a few minutes before the scheduled time. A bus will provide transportation to and from the SFA Observatory. The bus will leave promptly at the scheduled time, so don’t be late! (Note: You must ride the bus, use of personal vehicles is not allowed). It usually takes about 3 hours to complete the lab.
3. The night lab will be cancelled if it is raining or the sky is completely overcast (it is not necessary to show up at the bus stop if cloudy). If the weather looks questionable, the decision to ‘go’ or ‘cancel’ on a particular night, may not be made until shortly before lab time. Don’t get discouraged!
4. Night lab is a required component of the Astronomy 105 lab program. The night lab grade cannot be dropped.

SUPPLIES
Each student MUST bring the following supplies to every lab session.
1. Pencil and eraser
2. Flashlight with RED filter
3. Clear ruler with centimeter scale
4. Laboratory Manual
5. Star Chart (will be handed out at first lab)
6. Calculator (bring to every lab!)

CLASSROOM POLICIES
Each week’s lab begins with a brief presentation by the teaching assistant (15-30 minutes). Important instructions and procedures for completing the lab exercise are given at that time. At the conclusion of the presentation, students will then complete the lab exercise under the guidance of the lab assistant.

1. Come prepared! Read over the lab exercise before coming to class (see calendar) and bring required materials (clear ruler, calculator).
2. It is very important that you arrive on time or important instructions will be missed!
3. Before and during this presentation there will be occasional clicker questions for you to answer. Make sure you are prepared for these questions by completing the reading assignment, reviewing the previous week’s lab exercise and being attentive during the presentation.
4. Cell phones, pagers and other communication devices must be turned off during class.

GRADING
There are 12 grades that will be used to determine a lab average (11 indoor labs and the night lab). The two lowest indoor lab grades will be dropped. The night lab is a
required lab and cannot be dropped. The lab exercises will count 70%, the clicker average 10% and the Lab Exam 20% of the FINAL LAB AVERAGE. **FINAL LAB AVERAGE** = (Average of Lab Exercises X 0.70) + (Clicker Average x 0.10) + (Lab Exam X 0.20) Astronomy 105 (Lecture) and Astronomy 105L (Lab) are averaged into one grade and **THE SAME GRADE WILL BE RECORDED FOR BOTH LECTURE AND LABORATORY.** The **FINAL COURSE GRADE** is explained in your lecture syllabus.

**LAB ABSENCES**
We realize that occasionally there are legitimate reasons for missing labs (such as illness). We have made accommodations for excused indoor lab absences in your lab average by simply dropping the two lowest grades. **Warning:** Do not miss lab for whimsical reasons! If you miss more than two labs, your lab average will be reduced substantially. If three or more, you will fail the course.

1. There are no make-up labs.
2. Students will receive a grade of zero for each lab absence.
3. Students must attend their assigned lab. Transfers from one lab section to another are not allowed.
4. As always, students are responsible for missed lab material.

**ACADEMIC INTEGRITY (A-9.1)**

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Definition of Academic Dishonesty:**
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class (homework, clicker, exams, lecture or lab); (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

Penalties may include no credit or failure in the course.

**CHEATING**
WITHHELD GRADES SEMESTER GRADES POLICY (A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

STUDENTS WITH DISABILITIES:

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/)
The SFA Observatory is 11 miles north of main campus on Highway 259 toward Henderson. Only the night lab will take place at the observatory. We will always meet at the Old Stone Fort Museum next to Miller Science Building.

- **Where do I go to get on the bus?**

  You must ride the bus to the observatory. Use of personal vehicles is not allowed. On the evening of your night lab, meet at the bus stop a few minutes before the scheduled time. The bus will provide transportation to and from the SFA Observatory. The bus will leave promptly at the scheduled time, so don't be late! It usually takes about 3 hours to complete the lab.