ASTR 110 Lab M01: Introduction to Astronomy

TA: Lauren Kahre
Office: Astronomy Building 108
Office Hours: Wednesday 11:30-1:30
Phone: (575) 646-6328
Email: lkahre@nmsu.edu
Website: http://astronomy.nmsu.edu/lkahre/ASTR110.html
Lab: Monday 1:30-3:30
Location: Biology Annex 102

Class Policies

Attendance is mandatory. Please arrive on time and expect to use the full 2 hours to complete the lab.

Bring a copy of the lab and read it before you come to lab. This makes everyone’s (including yours) life much easier! Check the schedule to make sure you bring the correct lab, since we won’t be going through the labs in the same order of the manual.

There will be no make-up labs. The only exceptions are for medical emergencies, university travel, etc. If you know in advance you will miss a lab, let me know and I can arrange something.

Work together in groups of 3 or 4. Each group should submit one copy of their in-lab work with all members’ names on the top. Each group member must complete their take-home section individually.

Labs are due 1 week from when they are assigned. Late work will not be accepted, unless you speak to me and have an acceptable excuse. Acceptable excuses include university travel and events, sickness, emergencies, etc. Exemptions to this policy will be at my discretion.

Plagiarism will not be tolerated. Do not copy from the Lab Manual, Wikipedia, your classmates, or any other source without citation. Plagiarism will result in a zero for the lab; repeated instances of plagiarism will result in a zero for the class and a letter to the Dean. Be aware of the Student Code of Conduct.

Campus Observatory

You are required to go to the campus observatory twice a semester. The semester is split into two halves. The first half is from September 4-October 9, the second is from October 14-November 20. Bring four observatory sheets each time you go. These sheets are in the back of your lab manual. You will be shown four objects and will have to sketch and record information about them. On your own you will look up a fact about each object. Be sure to cite your sources!

The Tombaugh Observatory is located on campus on Williams Street by the track and intramural fields. The telescopes are in the white buildings with domes on top. The observatory will be open Mondays and
Wednesdays this semester, but will close if it’s cloudy, so don’t wait until the last week or you could be out of luck! Before you leave for the observatory, check the observatory hotline (646-6278) or the observatory website (http://astronomy.nmsu.edu/astro/observatory) to make sure it is open that night.

**Helpful Hints**

If you’re confused, ask me for help! I’m not a mind reader; I may not know you’re having trouble until you tell me.

Answer every question and show your work. I can’t give partial credit for no answer or a wrong answer with nothing telling me how you got there.

Always write units with your answers.

Avoid calculator errors! 5/2*PI is not the same as 5/(2*PI).

**Tutoring**

**Zuhl Library Student Success Center**
Located on the 2nd floor of Zuhl Library
http://ssc.nmsu.edu/zuhl/tutoring/
Phone: (575) 646-6050
This is a drop-in tutoring service offered by the library. No appointment is necessary and at least 30 minutes of face-to-face tutoring is guaranteed

**The Crimson Scholar Residential Mentors**
http://ssc.nmsu.edu/zuhl/tutoring/
Located in the La Vista Learning Lounge in Garcia Hall
Phone: (505) 646-5590
Offers free tutoring services to all NMSU students in a variety of classes and subjects (including Biology, Chemistry, Engineering, Mathematics, and many more). Students may walk-in or schedule a tutoring appointment.

**Academic Support Center**
Located in the ASC Building (just north of the Science Center)
http://nmsua.edu/asc/
Phone: (575) 439-3853
Offers drop-in or by-appointment tutoring, one-on-one and group tutoring. Tutoring in a variety of classes and subjects (including Calculus, Biology, Chemistry, Physics, Accounting and many more)

**Student Success Center-Hardman**
Located in Hardman Hall Room 210
http://cas.nmsu.edu/hardman/index.html
Phone: (575) 646-3136
Provides mid-semester courses, daily workshops, and walk-in sessions for study skills, time management, note-taking, and test-taking.
# Lab Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab</th>
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<tbody>
<tr>
<td>August 26</td>
<td>Lab 1: Introduction to Astronomy 110 Lab</td>
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<tr>
<td>September 2</td>
<td>Labor Day, no lab!</td>
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<tr>
<td>September 9</td>
<td>Lab 2: Origin of the Seasons</td>
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<td>September 16</td>
<td>Lab 9: Optics</td>
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<td>September 23</td>
<td>Lab 8: Measuring Distances Using Parallax</td>
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<td>September 30</td>
<td>Lab 3: The Surface of the Moon</td>
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<td>October 7</td>
<td>Lab 5: Introduction to the Geology of the Terrestrial Planets</td>
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<td>October 14</td>
<td>Lab 7: The Orbit of Mercury</td>
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<td>October 21</td>
<td>Lab 4: Shaping Surfaces in the Solar System: The Impacts of Comets and Asteroids</td>
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<td>October 28</td>
<td>Lab 11: Our Sun</td>
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<td>November 4</td>
<td>Lab 10: The Power of Light: Understanding Spectroscopy</td>
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<td>November 11</td>
<td>Lab 12: The Hertzsprung-Russell Diagram</td>
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<td>November 18</td>
<td>Lab 14: Galaxy Morphology</td>
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<td>November 25</td>
<td>Thanksgiving, no lab!</td>
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<tr>
<td>December 2</td>
<td>Lab 16: Hubble’s Law: Finding the Age of the Universe</td>
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<td>TBD</td>
<td>REVIEW</td>
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