

# **ASTR 1010: Solar System Astronomy**

## **Lab Syllabus**

Fall 2017 \* 528 Kell Hall  
**Labs begin on August 28<sup>th</sup>.**

**Student Materials:** Bring the following to class **every** lab period,

- Activities in Astronomy, 2013 Edition, by John W. Wilson,
- Pencils & Eraser,
- Scientific calculator (not a cell phone!).

**Attendance:** Students must attend the lab section for which they have enrolled. Because many labs are full, students **cannot** attend another section to make up a missed lab class. However, your lowest score will be dropped.

**Honesty Policy:** Students are expected to follow the honesty policies of the university. Any work that does not represent your own efforts will receive a score of zero. When group work is done, it is expected that each student in the group will reply to questions using their own words. Therefore, **do not copy other student's lab work or observations.**

### **Lab Grades:**

- Laboratory work is to be completed in class and turned in at the end of each lab period. Late labs, or lab work done outside of class will not be accepted.
- Each completed lab will be scored on a scale of 0-10 points. Your lowest lab score will be dropped. Therefore, if you miss lab for any reason that will become your dropped score.
- Your average lab score will count as 25% of your overall ASTR 1010 grade.
- Failure to attend at least half of the lab classes will result in an F for the entire course because this is a lab science and lab attendance is required. So if you make an A in lecture but do not regularly attend lab you will fail the course.

**Extra Credit:** There are 10 extra credit points available in the lab.

- 4 Points: Attending a Hard Labor Creek Observatory Open House.
- 3 Points: Visiting a second (different) observatory, in addition to the requirement for Lab 28.
- 2 Points: Building, and bringing to lab early, the quadrant for Lab 24.
- 1 Point: Bringing to lab a Moon phase picture for Lab 24 early in the semester.

**Lab Website:** More information about labs, observing sessions, teaching schedules, etc can be found at <http://www.astro.gsu.edu/lab>

## Tentative Weekly Schedule

Dates	Description
Aug. 28- Sep. 1	Lab 1: The Celestial Sphere and Planispheres <b>TERM PROJECT</b> , Lab 24: Observing Phases of the Moon (20 pts.) Lab 28: Visiting an Observatory. Both are <b>required</b> and cannot be dropped. Both are <b>due</b> on the last day of lab.
Sep. 4-8	<b>LABOR DAY Break! NO LABS MEET!</b>
Sep. 11-15	Lab 2: Phases of the Moon
Sep. 18-22	Lab 3: Planetary Orbits
Sep. 25-29	Lab 4: Mass of Jupiter
Oct. 2-6	<i>Handout</i> : Scale Sizes of the Solar System
Oct. 9-13	Lab 5: Construction of a Refracting Telescope
Oct. 16-20	Lab 7: Lunar Features
Oct. 23-27	<i>Handout</i> : Eclipses
Oct. 30- Nov. 3	Lab 9: Impacts and Craters
Nov. 6-10	Lab 19 & 22: Solar Observing & Measuring the Diameter of the Sun (Subject to Change!)
Nov. 13-17	<i>Handout</i> : December 21st 2012: Are we all going to die?
Nov. 20-24	<b>Thanksgiving Break: No Labs</b>
Nov. 27- Dec. 1	Lab Evaluation, <b>Turn in Lab 24</b> , Observing Phases of the Moon. <b>Turn in Lab 28</b> , Visiting an Observatory. To receive credit for this lab, you must turn in the completed and signed page from lab 28 in your lab manual. Your lab instructor will announce, in lab, evening observations to be held on campus to complete this requirement, OR you can attend any public night at a local observatory such as <a href="#">Fernbank Science Center</a> , or <a href="#">Hard Labor Creek Observatory</a> .

Lab Instructor's Name: \_\_\_\_\_  
 Lab Instructor's Email: \_\_\_\_\_  
 Lab Instructor's Office: \_\_\_\_\_

If you encounter problems that your lab instructor cannot handle, please contact your lecture class instructor and/or the Astronomy Lab Manager, Dr. John Wilson ([wilson@astro.gsu.edu](mailto:wilson@astro.gsu.edu)).