

ASTR 1010: Solar System Astronomy Lab Syllabus

Spring 2015 * 528 Kell Hall
Labs begin on January 26th.

Lab Instructor's Name: **Katie Lester**
Lab Instructor's Email: Lester@astro.gsu.edu
Lab Instructor's Office: Kell 515

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

- Activities in Astronomy, 2013 Edition, by John W. Wilson,
- Pencils & Eraser,
- Scientific calculator (doesn't have to be a graphing calculator, just something that can do exponents and square roots.)

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 www.astro.gsu.edu/lab.

Tentative Weekly Schedule

| Dates | Description |
|----------------|--|
| Jan. 26-30 | Lab 1: The Celestial Sphere and Planispheres TERM PROJECTS - Lab 24: Observing Phases of the Moon (20 pts) AND Lab 28: Visiting an Observatory (10 pts). Both are required and cannot be dropped. Both are due on the last day of lab. |
| Feb. 2-6 | Lab 2: Phases of the Moon |
| Feb. 9-13 | Lab 3: Planetary Orbits |
| Feb. 16-20 | Lab 4: Mass of Jupiter |
| Feb. 23-27 | Handout: Scale Sizes of the Solar System |
| Mar. 2-6 | Lab 5: Construction of a Refracting Telescope |
| Mar. 9-13 | Lab 7: Lunar Features |
| Mar. 16-20 | Spring Break! NO LABS MEET! |
| Mar. 23-27 | Handout: Eclipses |
| Mar. 30-Apr. 3 | Lab 9: Impacts and Craters (Subject to Change!) |
| Apr. 6-10 | Lab 19 & 22: Solar Observing & Measuring the Diameter of the Sun (Subject to Change!) |
| Apr. 13-17 | Review Game (Subject to Change!) |
| Apr. 20-24 | No lab this week = You do have to turn in your projects, but we will not meet during lab time. Turn in Lab 24 (Phases of the Moon) AND Lab 28 (Visiting an Observatory) ANYTIME BEFORE APRIL 24 at 1pm. Do Lab Course Evaluation at home: Go to lab website www.astro.gsu.edu/lab --> click on "Course Evaluations" link |