ASTR 008 – Introduction to Astronomy Lab
Spring 2017
LL 221

Instructors:

Prof. Ginny McSwain
office: LL 405
email: mcswain@lehigh.edu
phone: 8-5322

TA: Jon Labadie-Bartz
office: LL 308
email: jmℓ612@lehigh.edu
phone: 8-4915

Course Objectives:

Students will gain experience applying astronomical research methods to understand the the Solar System, stars, the Milky Way Galaxy, and the Universe.

This one-credit laboratory is designed to accompany the three-credit course ASTR 007, Introduction to Astronomy. Although the course (007) can be taken without the laboratory (008), the reverse is not permitted. Students registered for ASTR 008 must be enrolled concurrently in ASTR 007 or have already passed ASTR 007.

Required Materials:

- Course pack: *Introduction to Research in Astronomy & Planetary Sciences*
- Supplemental labs from the Contemporary Laboratory Experiences in Astronomy (CLEA) will be provided for some experiments.

Grading:

Each laboratory will be graded on the basis of 10 points maximum. Your grade will be based on how well you performed and analyzed the experiment and, particularly, on how well you communicated what you did through your notebook entries. Laboratory notebooks will be collected at the end of each laboratory session. You are required to do all of the experiments, and to be present for all of your scheduled laboratory meetings. Students will be allowed to drop one lab grade with no penalty.

Makeup labs are not allowed without a valid written excuse. If you do have to miss a lab, consult with Prof. McSwain and/or the TA as soon as possible (in advance, if possible) so that they so that can work with you to schedule a makeup lab session.

Lab grades will not be curved. After all student work is accounted for, a curve may be applied to the midterm and/or final averages if necessary.

Academic Integrity:

Copying work from other students or outside sources is considered plagiarism, and it will not be tolerated. Although students will work in small groups (2–3 students) during lab, each student should write their own analysis in their own words, to be graded individually. Copying the analysis of a lab partner or another student is considered cheating. Outside references (other than the class textbook) must be properly cited if used on any assignment. Any student found to have engaged in academic misconduct on a graded assignment or exam may be assigned a zero for that assignment, assigned an F in the course, and/or reported to the Dean of Students.

Electronics Policy:

Each lab will use the desktop computer provided in the classroom. Personal laptops, cell phones, or other electronic devices (other than a calculator, perhaps) are not allowed.

Accommodations for Students With Disabilities:

If you have a disability for which you are or may be requesting accommodations, please contact both the professor and the Office of Academic Support Services, Williams Hall, Suite 301 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.

Tentative Laboratory Schedule:

Jan. 24:	Review of syllabus and Introduction
Jan. 31:	Lab 1: What's Out There?
Feb. 7:	Lab 2: Observing the Sun's Position and Motion
Feb. 14:	Lab 3: Monitoring the Moving Constellations
Feb. 21:	Lab 5: Observing Jupiter's Moons
Feb. 28:	CLEA: The Revolution of the Moons of Jupiter
Mar. 7:	Lab 6: Studying Exoplanets
Mar. 14:	Spring Break
Mar. 21:	
Mar. 28:	Lab 4: Inquiring About Earth's Weather
Apr. 4:	CLEA: Astrometry of Asteroids
Apr. 11:	Lab 7: Observing Features on the Sun
Apr. 18:	Lab 10: Habitable Zones
Apr. 25:	Lab 11: The HR Diagram
May 2:	Lab 8: Exploring Galaxy Zoo - One

This syllabus is only a tentative outline of the course. The grading policy, lab schedule, or the topics covered in class may change as needed.