Description of Course:
Astronomy 161 Lab is a continuation of your Astronomy 161 Lecture course. This course is designed to enhance your understanding of astronomy principals in an applied setting through experiment. The lab experiments will further emphasize what is being taught in lecture.

Required Materials:
For each lab you are to bring your lab manual, pens/pencils, and a calculator.

Lab Reports:
For each lab, you will record collected data and complete the questions asked on the provided answer sheet. This also includes any required graphs of data collected. When your answer sheets are complete, they are to be handed in BEFORE the beginning of the next meeting time (one week later). I will not accept lab reports after this time, and you will receive a zero for the lab.

Attendance:
Attendance is MANDATORY for every lab! In general, you will not be permitted to do your experiments in another section. If you miss ONE lab without prior approval from me, you will receive and incomplete for the course and will automatically be dropped from the class. This is departmental policy, and I will not tolerate excuses. In cases of emergency, you may make-up a lab in my other morning section with prior approval from me or make it up at the end of the semester (11/26). I do not recommend either of these options. Night observing sessions are treated just like a normal lab-you can not miss one! I will provide more information as it becomes available.

Grading:
Lab Reports 65%
Observations 20%
Lab Final 15%
Total 100%

*Students who have a disability that requires accommodation(s) should make an appointment with the Office of Disability Services (947-6087) to discuss their specific needs.
Schedule
8/22 Classes Begin
8/27 Exercise 2: Measurements and Unit Conversions
9/3 Labor Day NO LAB
9/10 Exercise 1: Sky Maps
9/17 Exercise 5: Angles and Coordinates
9/24 CLEA 1: The Revolution of the Moons of Jupiter
10/1 S1: The Sky – An Introduction to the Stars and Constellations
10/8 Fall Break NO LAB
10/15 Exercise 13: Stellar Magnitude and Distance
10/22 Exercise 6: Sundial Construction and Apparent Solar Time
10/29 Exercise 8: Acceleration of Gravity
11/5 T3: Introduction to the Digital Darkroom (Adobe Photoshop)
11/12 Final Exam
11/19 Thanksgiving NO LAB
11/26 MakeupLab
12/3 Classes End (12/4)

Telescope Practicum (Observation Experiences)

T1: Celestial Observations Using the Telescope
T2: Astrophotography and the CCD Camera