

# Astronomy Lab [PHY1221]

## Spring 2009 Syllabus

**Lab Manual :** The primary lab manual for this course is the “Astronomy Media Workbook” by Michael LoPresto (bundled with the Astronomy lecture textbook) – Fifth Edition. Additional material used in the lab will be posted online. There is a “schedule” page that shows the weekly schedules of the lab experiments for the term. There are links for the additional portions of the lab manual (pdf format) for that experiment, and any additional files needed. That would be a very useful page to bookmark! Also included on that page are the lab report requirements.

**Laptops during the lab session:** Each group will need to have at least one, if not two laptops available during the lab session. All of the labs involve using online resources (Mastering Astronomy) or on-laptop simulation software (Skygazer).

**Lab website :** There is a web page containing the schedule of the labs, and other resources here :  
<http://qbx6.ltu.edu/natsci/physics/astrolab.shtml>

**Lab course objectives:** The course objectives for this lab can be downloaded from the website above.

**Schedule:** Labs are done each week. Students will work in groups of two (three only if necessary). The final lab reports are to be individual effort - not a group effort. Labs are to be **typed** and are to conform to the “lab report format” as outlined in the lab report format document on the lab web page. The lab report will be due at the start of the next lab session, unless otherwise noted.

**Lab Report Format:** The lab report should have a cover page, include the worksheets from the lab session, and have a final page with a ½ page comprehensive conclusion about the on all activities performed during that experiment. The cover page should include the Lab #, title, your name, your partner’s name, and the honor code, as indicated below.

**Academic Dishonesty:** All assignments submitted by undergraduate students must be accompanied by the following pledge: “I have neither given nor received unauthorized aid in completing this work, nor I have presented someone else’s work as my own.” Please type the pledge on the cover page and sign every time you submit a lab report.

**Tutorials from the Media workbook:** The two major portions of the lab experiments involve online tutorials at the Mastering Astronomy website, and Skygazer experiments using the simulation software on the laptop. The schedule page indicates which Mastering Astronomy tutorials and which Skygazer experiments will be done in a given week. You might want to bring for the lab only the pages with the activities you will be working on that day instead of the entire workbook. In addition, there are some handouts that will cover some in-lab experiments. These will be available in PDF format on the schedule page. **It would also be very useful to bring your lecture textbook to the lab sessions!**

**Mastering Astronomy tutorials:** You will need to sign on and register yourself with the Mastering Astronomy website (your registration information is available with the textbook). A tutorial on how to register can be found here:

[http://qbx6.ltu.edu/s\\_schneider/courses/intro\\_astro/register\\_online.shtml](http://qbx6.ltu.edu/s_schneider/courses/intro_astro/register_online.shtml)

**Skygazer experiments:** The media workbook contains recipes for configuring the Skygazer software for each individual experiment. A tutorial on how to setup the Skygazer software (and additional sample files) can be found here:

[http://qbx6.ltu.edu/s\\_schneider/courses/intro\\_astro/skygazer1.htm](http://qbx6.ltu.edu/s_schneider/courses/intro_astro/skygazer1.htm)

**Grade:** Each lab will be worth 100 pts. Late lab reports will be penalized with 5 points per week day. The final grade for the lab will be calculated following the scale:

**A** >93%      **A-** >90%      **B+** >87%      **B** > 83%      **B-** >80%      etc.

**Office hours :** T.B.A. by your lab instructor.