Astronomy Laboratory (AST1022L)

Fall 2011

Section 0471/0472

Instructor: Bo Ma
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Class: Section 0471, Thursday 2-3, 08:30am-10:25pm
Section 0472, Thursday 4-5, 10:40pm-12:35pm
Office Hours: T 3:00pm-4:00pm, W 2:00pm
-3:00pm or by appointment

Lab Director: Dr. Francisco Reyes
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Textbook
Hands on Astronomy Laboratory Manual, available at Target Copy Center in Butler Plaza (3422 SW Archer Rd.) and on University Ave (1412 W University Ave.).

Locations
Class will normally meet in Room 7, Bryant Space Science Center. However, the three mandatory night labs will be held at the Campus Teaching Observatory (CTO), location of which can be found at: http://www.astro.ufl.edu/information/cto.html

Course Objectives
AST 1022L Astronomy Laboratory counts for one (1) credit of Physical Science (P) towards the General Education requirement. It introduces students to the scientific method as applied to field of Astronomy. The students are introduced to the process of making astronomical observations, quantitatively analyzing those observations, extracting information about astronomical bodies such as the Sun, Moon, planets, stars, nebulae, and galaxies, and understanding the basic physical processes that take place in these bodies. The students will also be introduced to the process of writing a report on an experiment, communicating the details, results, and conclusions to a reader not necessarily familiar with the experiment.
You are not required to have any previous background in astronomy or physics. Only some basic math skills will be used during the course.

Bring to Class
- Lab Manual
- Pen/pencil, paper
- Scientific Calculator
- Bug spray (for night labs)
Course Requirements

Attendance: You must attend EVERY lab session, including the three night labs. The lab reports (or data sheets) will not be accepted if you do not attend the corresponding lab sessions. Please arrive at the lab on time. Lateness longer that 20 minutes will be considered as an absence. A make-up lab is only considered if you have an excused absence, which includes illness, jury duty, military obligation, religious holiday, and university-sponsored activities. In any case, you should notify me and provide documentation prior to the next lab session. Failure to contact me before the next session will result in a zero for that lab.

Lab Reports: There will be 13 day-time experiments. For 6 of them, you will have to write full lab reports, while for the other 6 experiments, you only need complete the forms provided in the lab manual and answer the questions listed there. An instruction about how to write a full lab report can be found in Lab Report Guidelines. In each lab, you must have your data sheet signed by the instructor before you leave. And when you turn in the report you must also include your original, signed data sheet attached to the back. A report without signed data sheet will not be accepted. Every report is due at the beginning of the following lab session. If you hand in a lab report late, there will be 20 points deduction per day (not counting weekend days or holidays) and you will get 0 point if the report is late by 4 days. In addition, when you turn in a late lab report, please bring it to the main office of the Astronomy Department (211 Bryant), and give it to one of our secretaries, who will stamp your report with the date. DO NOT leave a late report on my desk, or slide it under my office door. A late report not handed in properly will not be graded.

Night Labs: There will be three night labs over the course of the semester. you only need to simply record your observations on the provided forms and hand them in at the end of the lab. Night labs are subjected to weather conditions. If a night lab session is cancelled, I will send an E-mail message at least 30 minutes before the lab time. If you don’t get a message, you must come to the CTO at the scheduled time, unless there is a thunderstorm, tornado alert or other types of bad weather.

NO FOOD OR DRINK is allowed in the classroom. Use of cell phones or texting is also not allowed during the lab sessions.

Grading
There will be 13 daytime labs and 3 night labs. Your points completely come from your reports and/or datasheets. Just being present during an experiment do not earn you any points. Each report/datasheet will be graded in the scale of 100 points. The six full lab reports will make up 60% of your final score, the other seven daytime lab report will make up 25% of your final score, and the three night lab data sheets will make up the left 15%. The following grading scale will be applied to calculate your final grade:

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1They are Impact Craters, Light is a wave, Astronomical Telescope II, Astronomical Spectroscopy, You can Weigh Jupiter, and Measuring the Hubble Constant.
A  90 or above  A-  87 ∼ 89
B+  84 ∼ 86  B  80 ∼ 83
B-  77 ∼ 79  C+  74 ∼ 76
C   70 ∼ 73  C-  67 ∼ 69
D+  64 ∼ 66  D   60 ∼ 63
D-  57 ∼ 59  E   56 or below

The College of Liberal Arts and Sciences has a strict policy on incomplete (I) grades. No incomplete grades will be assigned for this course. If you cannot attend the lab sessions on a regular basis, and are at risk of failing the class, talk to me and speak with an advisor and consider dropping the class.

**Academic Honesty**
Cheating in any form will not be tolerated. For some of the experiments, you are allowed to work in groups and share the data, but the report must be each’s own work. Copying the report (or part of it) from someone else is definitely cheating. Other behaviors, such as forging data, or using other’s data for a lab you missed, copying entire paragraphs from an Internet website, are also considered as cheating and are not tolerated. If cheating behavior is found, a zero point will be assigned to the report/datasheet. If it happens again, a failing grade will be assigned with no exception, and you will possibly be reported to Student Conduct and Conflict Resolution.

**Special Accommodations**
If you are a student with disability and would like to request disability-related accommodations, you are encouraged to contact me and the Disability Resource Center as early in the semester as possible. The Disability resource Center is located in the 001 Building 0020 (Reid Hall). The phone number is 392-8565. I would need the documentation provided by the center.