

AST 103

Astronomy Laboratory Classes

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- Textbook:* "The Cosmic Perspective" / "Stars & Galaxies" 5th ed., by Bennett, *et al.*
- Lab Manual:* The AST Lab Manual is available from the college bookstore; please pick it up right away!
- Internet:*
- * Class Webpage: <http://rigel.csi.cuny.edu/rowan/index.html>
 - * Observatory's Home Page: <http://supernova7.apsc.csi.cuny.edu>

Brief Course Description

The emphasis of this lab will be on the general *understanding* of the scientific principals and fundamental laws of Physics and Astronomy. Science is not magic - anybody can understand scientific principals, provided you learn how to *think scientifically* (this is comparable to learning how to swim: it is not a gift you are born with - you have to *learn* how to swim). The basis of all science lies in experimenting and testing - these labs are intended to give you a flavor of scientific methodology, and to have you critically examine data and observations.

Throughout this semester I would like you to take this opportunity to look up at the night sky from time to time and begin to become familiar with the stars and planets that adorn the celestial vault above our heads. It is hoped that from your experiences in this class, as well as from your telescopic observations over the course of the semester, you will in some small way gain a greater appreciation for the wonders of the universe and begin to contemplate your place in it.

Course & Grading Information

{ all information contained herein is subject to change by the Instructor with notification to students }

Homework

a) Before the Lab

Make sure you have done the reading assignments and the pre-lab *before* you come to the lab (the pre-labs are worth 15% of your lab grade). You will find it very useful to read over the laboratory exercise, particularly any introductory material, before we work on it in class.

b) After the Lab

Finish all the calculations, answer any questions, complete any graphs / diagrams, and submit the lab report. The lab report is due one week after the lab, unless otherwise stated. Late reports will receive a one letter grade penalty for each week that they are late. No lab reports from the first half of the semester will be accepted after the midterm examination.

Important: please hand in “clean” lab reports, that is, they should be legible, tidy and comprehensible. Please ensure to include your full name and lab section or a grade can not be assigned (copies are not acceptable).

Grading

• The tests (midterm and final) are worth half (50%) and the labs overall are worth the other half of the grade as follows:

-Midterm	25%	material: first 6 labs
-Final	25%	material: last 6 labs + some comprehensive questions
- Pre-labs	15%	
-Lab Reports	35%	12 lab exercises,

Important: Doing well on lab reports is **not** sufficient. Make sure you “thoroughly *understand*” them (particularly the scientific concepts), and remember that the **exams** constitute half of the final grade!

Policy

- Please work in groups! Make joint measurements and discuss the results with each other! However, your lab reports must be done individually!
- Other class assignments, papers or projects may, or may not be, assigned during the semester.
- There are **NO** make-up Exams, unless you bring a documented excuse for that exam (special cases apply).
- Attendance is mandatory. Since the laboratories are almost always occupied by other classes, missed labs can not be rescheduled. Some of the lab exercises do not require much in terms of equipment such as some of the computer labs and could be done at home if missed. If you are absent for a lab you are still responsible for the material covered as it will appear on the exams. Students who miss more than two lab sessions are at risk of receiving a WU grade for the course (please keep this important fact in mind!).
- Time management is the key to success! For each hour in lab, expect to do TWO hours of work at home.