ASTR1110L & 2030L – Introduction to Astronomical Observations

Fall 2013

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Web Page: www.physast.uga.edu/~loris follow the link to ASTR1120L & 2030L. IT IS IMPERATIVE THAT YOU MONITOR THIS WEB PAGE AT LEAST ON A WEEKLY BASIS. Important announcements for the course will be posted there throughout the semester.
Phone: 542-2876

Class: Tuesday 8:00 – 10:45 PM. The first 3 classes will be in room 202 Physics. The remaining classes will be in room 221. When we will use the small telescopes to make observations we will be outdoors in the quadrangle directly east of the Physics Building and directly south of the Geography/Geology Building. Be sure to wear warm clothing if the evening is cold.

Office Hours: Mondays 3:30 PM – 5:00 PM or by appointment

COURSE OBJECTIVES

The purpose of this course is to introduce you to the night sky and to small telescopes for making simple astronomical observations. These courses are de-coupled from the ASTR 1010,
ASTR 1020, ASTR 1110H, and ASTR 1120H lecture courses in the sense that (1) they don’t have to be taken the same semester as the corresponding lecture course and (2) they don’t necessarily cover the subject matter of the lecture course. The reason for not covering the subject matter of the corresponding lecture course is that it is too difficult to observe most of the non-stellar objects discussed in ASTR 1020 or ASTR 1120H using our small telescopes at the not-very-dark-sky site we use.

The basic aim of the course is to get the student to complete 6 astronomical lab exercises, 3 of which involve telescopic observations. This will give the students an introduction to the night sky and to using small telescopes. The 3 non-telescope labs involve using online astronomical databases; an important technique in modern astronomy. There will also be a written lab final exam.

METHODOLOGY

You will choose 3 of 4 observing labs during the course of the semester. The 4 observing labs are the following:

1) Finding the planet Uranus and charting its motion over several weeks.
2) Finding and charting the path of Comet ISON.
3) Lunar observations and calculations (doable throughout the semester)
4) Sketches of interesting deep sky objects and double stars (doable throughout the semester).

In addition to the observing labs you will choose 3 of 4 written (indoor) labs during the course of the semester. The 4 indoor labs are the following:
1) Using the Virtual Observatory database to study a selected (by me) area of the sky.
2) Using the SIMBAD database to determine physical information on a sample of celestial objects.
3) Star charts in general
4) Using the Naval Observatory’s star chart database to create maps of small regions of the sky.

By the end of the semester, you will have turned in lab reports on 6 of the above labs (3 observational and 3 indoor).

A write-up describing each lab is on the web page.

GRADING

Each lab report is 13% of your final grade. Thus, 6 labs contribute a total of 78% to your final grade. The remaining 22% will come from the lab final administered during the last week of classes. From the lab reports and the lab final, your total score on a scale of 100 will be computed. That numerical grade will be turned into a letter grade using the following key:

A is for a score of 90.00 or above, A- is for the range 87.00 – 89.99, B+ is for 84.00 – 86.99, B is for 80.00 – 83.99, B- is for 77.00 – 79.99, C+ is for 74.00 – 76.99, C is for 70.00 – 73.99, C- is for 60.00 – 69.99, D is for 50.00 – 59.99, and F is for any average below 50.00.

I will break up the class into groups of 3 (or, if the situation calls for it, groups of 4). A lab report can be turned in by a group, and it is not necessary that all members turn in an individual lab report. However, the lab final exam is taken individually.
STUDENT RESPONSIBILITIES

Please make a reasonable attempt to arrive on time. If you must leave earlier than the scheduled end of class, please try to use the upper exits at the top of the lecture hall when we are in room 202. Class disruptions or distracting behavior will not be tolerated.

Ask for clarification on anything you find unclear, ambiguous, or unspecified in this syllabus. This includes both course policies and astronomical topics.

Know the rules concerning withdrawals and incompletes, published in the UGA Undergraduate Bulletin. Note that I will NOT withdraw you from the course for excessive absences. Note also that after the midpoint of the semester, a withdrawal is assigned a grade of WF, except in those cases in which the student is doing satisfactory work and the withdrawal is recommended by the Office of Student Affairs because of emergency or health reasons.

ACADEMIC HONESTY

All students are responsible for knowing, understanding, and abiding by the academic honesty policy of the University of Georgia, which can be found online at http://honesty.uga.edu. If you have any questions about this policy and how it pertains to your work in this course, please ask me for clarification.