

ASTR 1010L SYLLABUS

Course title: Laboratory for Astronomy of the Solar System
Class hours: 2

Catalog #: ASTR 1010L
Credit hours: 1

Instructor Dr. Charles Johnson
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Class web page http://faculty.sgc.edu/cjohnson/Classes/On_Line/ASTR_1010/Fall_2013/Labs/Lab_Handouts.htm

Schedule

Dr. Johnson's Class Schedule For Fall 2013					
	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:59 AM	PHYS 1111/2211	Office Hour	PHYS 1111/2211		ASTR 1010 Lab
9:00-9:59 AM	8:00-9:15	Office Hour	8:00-9:15		8:00-9:50 PM
10:00-10:59 AM	Office Hour		Cabinet Meeting	Office Hour	
11:00 -11:59 AM	Office Hour			Office Hour	
12:00-12:59 PM					
1:00-1:59 PM	PHYS 1111 Lab	PHYS 1111			
2:00-2:59 PM	1:00-2:50 PM	1:00-2:50*	Office Hour	Office Hour	
3:00-3:59 PM	PHYS 2211 Lab	Office Hour*	Office Hour	PHYS 1111 3:00-5:30*	
4:00-4:59 PM	3:00-4:50 PM				
5:00-5:59 PM					
* On the Waycross Campus					

NON-STUDENT POLICY: It is campus policy that children and visitors may not be present in classrooms when classes are in session or laboratories at any time.

Course Description

ASTR 1010L. Laboratory for Astronomy of the Solar System. A laboratory course to augment and support ASTR 1010 0 - 2 – 1 Corequisite: ASTR 1010. Astronomy of the Solar System.

Course objectives

The lab activities will allow you the student to understand better the measurement process and the process scientists use to form conclusions. For example you will learn the importance of repeated measurements, the meaning of averages, and the errors associated with the measurement process. In this way you will learn that science is not exact and that all measurements have an associated uncertainty. You will then have to form conclusions based on imperfect and incomplete data, just like scientists do.

Activities, evaluation, and make-up policy

The student is expected to participate in all labs. Failure to show up for a lab will result in a zero for that lab. There will be **no lab make-ups** so make sure to come to lab. I will drop your lowest lab grade.

Each week you will need to write up a lab report. The lab report is due by Tuesday. The lab report must be type written.

The lab grades will be based on:

Lab Reports	100 %
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The letter grade assigned to each student will be based on the following:

Course Grade	Letter Grade
90 or above	A
80-89	B
70-79	C
60-69	D
Less than 60	F

Lab Reports

Your lab report should have the following layout:

- ☺ YOUR NAME AND THE NAMES OF YOUR PARTNERS.
- ☺ INTRODUCTION—a statement of the purpose of the experiment (one page long).
- ☺ DATA—use tables like the ones from the lab manual.
- ☺ SAMPLE COMPUTATIONS—show all work so if a mistake was made I can help you find it.
- ☺ GRAPHS—will be done on the computer.
- ☺ CONCLUSIONS—a few well-chosen statements about conclusions warranted by the data, and how these compare with theory. Comparisons should be numerical, in terms of percent error whenever possible and a discussion of possible sources of error are appropriate (half a page).
- ☺ ANSWERS TO QUESTIONS—if any are assigned

LABORATORY SAFETY POLICY:

1. Never play in the lab.
2. Never eat, drink or smoke in the laboratory.
3. Avoid putting objects found in the laboratory into your mouth.
4. Do not perform unauthorized experiments.
5. Know location of safety equipment and learn how to use it properly.
6. Always make sure safety goggles are worn when performing experiments requiring them.
7. Avoid setting things on fire and keep your hair under control.

ASTR 1010 Lab

8. Keep sinks clean. Do not put solid materials into them. Waste baskets are for solids, sinks for liquids.
9. Always flush flammable liquids, acids, and alkalis down the sink with plenty of running water.
10. If you are injured, notify your instructor and or lab assistant immediately.
11. Make sure all gas, water and electrical appliances are cut off at your lab station when you finish your work.
12. Prevent accidents, use common sense.

SPECIFIC LABORATORY EMERGENCIES:

1. CHEMICAL SPILLS anywhere on the body: Flush the area immediately with large volume of water from the nearest faucet. Remove contaminated clothing if necessary. Use no medication on the injury, but bandage and obtain medical attention if necessary.
2. CLOTHING ON FIRE: Prevent the victim from running. Have the victim lie down, and smother the flames with available clothing, a fire blanket, or by rolling the victim around on the ground. Towels, books, or other items aflame can be put or pushed in the sink with tongs and doused with water.
3. BURNS: Apply no medication for major burns. Cover the area with a sterile dressing and obtain medical help immediately. For minor burns, immerse in ice water or in cold water and bandage when comfortable.
4. CUTS AND PUNCTURES: Clean your hands and the victim's wound with soap and water, and remove any glass slivers from the wound. Apply a sterile dressing, and control any severe bleeding by applying pressure directly over the wound. Apply no medication. Always obtain medical attention for punctures or severe cuts because of the possibility of tetanus.
5. If the victim of an accident is sent to a medical facility, BE SURE THE VICTIM IS ACCOMPANIED BY ANOTHER PERSON.

HARDSHIP WITHDRAWAL: A hardship W may only be sought after midterm in the case of a non-academic hardship such as severe, extended illness. The procedure for seeking a Hardship W is located on page 62 of the college catalog.

Access Statement

If you have a disability and require reasonable classroom accommodations, please see me after class or make an appointment during office hours. If you plan to request accommodations for a disability, please register with the Office of Disability Services in Room 118, Powell Hall, phone number 912-260-4435. Also, if you find that any content in this course is inaccessible because of your disability, please contact me as soon as possible.

Counseling Services are confidential and available upon request. If you would like to schedule a session, referral forms are located online or outside the counselor's office. Please complete and submit the referral form to the counselor. *Do not submit by email.* Once you have submitted your form you will be contacted by phone to set up an appointment. The Counselor's Office is located on the Douglas Campus in Powell Hall, Room 119, phone number 912.260.4438, or Waycross Campus in the Dye Building, Room 130, phone number 912.449.7593.