

PHSC 1011 Lab Syllabus

Course title: Laboratory for Foundations of Physical Science
Class hours: 2

Catalog number: PHSC 1011
Credit hours: 1

Instructor Dr. Charles Johnson

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Class web page <http://faculty.sgc.edu/cjohnson/Classes/1011phsc/phsc1011.html>

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:59 AM	PHYS 1112/2212		PHYS 1112/2212		
9:00-9:59 AM	8:00-9:15		8:00-9:15		
10:00-10:59 AM	Office Hour	Office Hour	Cabinet Meeting	Office Hour	
11:00 -11:59 AM					
12:00-12:59 PM					
1:00-1:59 PM	PHYS II Lab	PHSC 1011 Lab	Office Hour	Office Hour	
2:00-2:59 PM	1:00-2:50	1:00-2:50	Office Hour	Office Hour	
3:00-3:59 PM			Office Hour	Office Hour	
4:00-4:59 PM	PHSC 1011	PHSC 1011			
5:00-5:59 PM	4:00-5:15	4:00-5:15			
6:00-6:59 PM					

Textbook

There will be weekly handouts on the class webpage. Make sure to check it often.

Course Objectives

-  To familiarize the student with laboratory techniques in physical science.
-  To provide an introduction to the physical nature of the universe.

While taking this class:

- Graduates will demonstrate sufficient knowledge of natural laws and processes to understand environmental and health issues of common interest.

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 so you can miss one lab without penalty. Do not waste this.

You will need to keep a lab notebook. The introduction should be in your notebook at the beginning of each week's lab. At the start of lab, I will walk around and check for your introductions. If you are late for lab, you will not get credit for having an introduction. If the introduction is missing, you will lose 2 points off that week's lab. After the lab is over the calculations and conclusion are due on Thursday. I will grade them and leave them outside my office door so you can collect them and work on the introduction for the next week.

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 Notebooks

Your lab notebook should have the following layout:

- 1) Your name and the names of your partners.
- 2) **Introduction**—a statement of the purpose of the experiment. This is a summary of what you will be doing in lab. (One page long).
- 3) **Data**—use tables like the ones from the lab manual.
- 4) **Sample calculations**—show all work so if a mistake was made I can help you find it.
- 5) **Graphs**—will be done on the computer.
- 6) **Conclusions**—How good or bad are your results. Compare your values with any accepted values. Comparisons should be numerical, in terms of percent error whenever possible and should include a discussion of possible **sources of error** (half a page).
- 7) **Answers to questions**—if any are assigned

The introduction should be neatly written, one page in length and must be in your lab notebook before the laboratory starts. You will also need to make your data tables and leave space for calculations. I will check your lab notebooks before the start of lab. You will have until the Thursday after lab to finish any calculations and your conclusion. You must turn in your finished lab by the Thursday after lab.

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.
- 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.

Specific Laboratory Emergences

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 58 of the college catalog.

Attendance Policy

The following is the Attendance Policy as outlined in the Student Handbook:

- 1) Each division will establish attendance policies for each course.
- 2) Work may be made up in case of absences with legitimate excuses. Excuses may be judged legitimate by the instructor involved. If the instructor does not accept the student's excuse, the appeal procedure will be the same as the grade review procedure.
- 3) Group excuses for college sponsored activities from the Dean of Students will be considered legitimate excuses.
- 4) It will be necessary that the requirements for each course be distributed at the first meeting of the class.
- 5)

To get the most from any course, each student should attend all the scheduled classes and laboratory periods. However, in a case where that is not possible the Division of Natural Science and Mathematics has the following specific requirements:

- 1) A student will be assigned the grade of zero for any assigned class work or exam missed because of an absence if the absence is not excused by the instructor.
- 2) A student will be given a grade of zero for any assigned work or exam missed because of an excused absence if the work missed is not made up.
- 3) The maximum number of class days that a student can miss and still receive credit for a class is twice the number of weekly meetings.

Non-Student Policy

It is campus policy that children and visitors may not be present in classrooms when in session or laboratories at any time.

Special Needs Statement

Students requiring classroom accommodations or modifications because of a documented disability should discuss this need with the instructor at the beginning of the semester. Students who have not presented validation for learning disabilities from the Regents' Center for Learning Disability (University System of Georgia) should complete all necessary paperwork and submit this to Ms. Annette Nation, Disability Services Coordinator, Powell Hall, Room 118. The telephone number is (912)-260-4435. Students who have not presented validation for physical disabilities should register with the Office of Disability Services.