

**Syllabus for HONS 158L**  
**Honors Physics II Lab (Section 1) – Spring 2016**

**Class Times/Location:** Wednesdays, 4:40-7:40 PM, Harbor Walk West Room 104

**Instructor Information:** Dr. Mike Larsen

**Office Phone:** 843-953-2128

**Email address:** LarsenML@cofc.edu

**Office Hours:** Monday 9:30-10:30 AM (HWWE 106/209); Tuesday 12:30-1:30 PM (JC Long 217); Friday 9:30-10:30 AM (HWWE 106/209). If you need help outside of “official office hours”, try to find me [my office door has a Dr. Larsen finder that can sometimes be helpful]; most often I’ll happily drop what I’m doing to help you).

**Office Location:** JC Long 217. Since our classes are at the Harbor Walk facility, I am also holding some of my office hours in Harbor Walk West. See above for details.

**Course Webpage:** [http://larsenml.people.cofc.edu/hons158\\_spr16.html](http://larsenml.people.cofc.edu/hons158_spr16.html)

(Please see course page for full description of course, rationale, and supplementary information).

**Attendance Policy**

Attendance is required for all lab sessions, and forms a portion of your lab grade. Because I am aware that sometimes “life happens” and you have to miss lab for an unplanned reason, I will be dropping one of your lab grades in each of several categories. (If all labs are attended, the lowest earned grade will be dropped in these categories; see grading section of the syllabus for more detail). If you have a known conflict with a lab (due to a sporting event, religious observance, interview, or other important personal event) it is *your* responsibility to use office hours to discuss options with the instructor *well in advance of the date in question* to work out a mutually acceptable solution.

Note that we will likely be utilizing all (or nearly all) of the 3 hours scheduled for the lab each week; please plan to be here for the full scheduled time. A few weeks we may finish early, but it would be a mistake to rely on that – it is hard to predict, and not likely to happen very often.

## Necessary Materials

- Closed-Toe Shoes
- College of Charleston HONS 158 Spring 2016 Lab Manual
- Lab Notebook
- Pen
- HONS 158 Text
- Scientific Calculator (*not* on your cell-phone!).

Coming to class prepared is expected; if you are missing any of these required materials, Dr. Larsen will penalize your attendance grade up to 25% for the day.

## Classroom Policies

This class is a science lab; a general good rule for life is to not have food or beverage in a science lab if you plan on staying healthy. (“Don’t lick anything in a science lab.”) Please do not bring food or drink to lab.

Open toed shoes are also forbidden in lab. If you are wearing open-toed shoes (sandals, flip-flops, etc.) the instructor may be required to remove you from class. At the very least, you may be offered (non-optional) alternative footwear for safety purposes. You also will lose attendance points for the day if you forget your closed-toe shoes.

There are also a number of safety concerns in a lab. Your safety is always your instructor’s top priority. It is expected that you will follow the instructor’s verbal announcements regarding all classroom behavior, and follow the safety guidelines as set out at the beginning of the semester at all times. If necessary, your instructor may – at his discretion – require you to leave lab for the day (and forfeit all points associated with the lab activities) in the interest of the safety of everyone in the room. No safety risks of any kind will be tolerated by the instructor.

## Honor Code / Code of Conduct

It is expected that you will adhere to the university’s [honor code](#) and student code of conduct, as can be found in your [student handbook](#).

### **Students with Disabilities**

The College will make reasonable accommodations for persons with documented disabilities. Students should apply at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying your professor as soon as possible and subsequently contacting your professor again at least one week before any specific accommodation is needed.

### **Grading**

Grades will be based on four (4) components.

- Attendance (10%). You will be expected to sign into lab each week. Your grade will be penalized if you are tardy, come unprepared, or do not wear closed-toe shoes to lab. Note that, in addition to explicitly counting as part of your grade, more than 2 absences will result in your semester lab grade being lowered an additional letter grade for each absence.
- Formal Lab Reports (40%). Several times throughout the semester, your instructor will inform you that you are expected to complete a formal lab report on one of the labs you have completed. Expectations for these formal labs will be distributed separately (and are posted on the course webpage). The formal lab reports will be due at least one week after the lab is conducted to give you time to prepare the report.
- Semi-Formal and Shoot for your Grade Labs (40%). In weeks when there is not a formal lab report assigned, your instructor will give detailed instructions as to how the lab will be graded for the day. Some weeks the lab may be a “shoot for your grade” lab, where your grade is determined by your group’s performance on a specified task. Other weeks, your group will be tasked to turn in some other materials that help to reinforce the ideas learned in lab that day. This may take the form of an abridged lab report, series of plots, answers to some questions, or some other activity. When a lab in this category is assigned, your instructor will make it clear what is expected. Due dates for these activities may also vary.
- Student Learning Outcome Assessments (10%). Twice during the semester, the instructor will assign an activity designed to assess your achievement in the 2 general education student learning outcomes stated on this syllabus. Details associated with these activities will be distributed separately.

Your lowest score (including absences as 0s) will be dropped from the second and third categories listed above. This does mean that if you miss two labs (a shoot for your grade and a formal lab, for example) you will be able to drop the absence for both the missing formal lab report and the shoot for your grade. Because we do not have the facilities to reschedule labs, **NO MAKEUP LABS**

WILL BE GIVEN FOR ANY REASON. This follows general Physics department policy, based on the availability of rooms and equipment.

You will not be doing the exact same labs as students in other sections of PHYS 102 or PHYS 112, thus attending another lab section to make up an absence will not be possible. Because of this restriction, I am dropping several of your grades as described above.

Grading Scale: The final grading scale will be *no more stringent* than:

A	$\geq 91$	B+	89	B-	80	C	71-78	D	60 - 69
A-	90	B	81-88	C+	79	C-	70	F	<60

**TENTATIVE Schedule:** We will be adapting the labs in your lab manual to varying degrees, often including components of multiple labs in a single session. Below is the TENTATIVE schedule planned by your lecture instructor:

Date	Lab
1/13	Coulomb's Law
1/20	Simple DC Circuits and Gauss' Law
1/27	Electric Fields
2/3	Circuit Reduction
2/10	Lecture Test 1 (During Lab)
2/17	Magnetic Fields and Magnetic Induction
2/24	Polarization
3/2	Reflection and Refraction and Lenses
3/9	No Lab – Spring Break
3/16	Lecture Test 2 (During Lab)
3/23	Interference
3/30	Photoelectric Effect
4/6	Lecture Test 3 (During Lab)
4/13	Radioactivity
4/20	Problem Solving

## General Education Student Learning Outcomes

- Students apply physical/natural principles to analyze and solve problems. This outcome will be assessed by writing a summary report of one of the labs during the spring session. It will count as 5% of the final lab grade.
- Students explain how science impacts society. This outcome will be assessed with an assignment requiring the student to relate a lab topic to their area of study. It will count as 5% of the final lab grade.

## Student Learning Outcomes

At the end of this course, successful students will be able to

- Perform measurements of electrical, magnetic, atomic, nuclear, and optical phenomena.
- Draw conclusions based on observations and data.
- Analyze quantitative information using sketches, graphs, tables, and statistics.
- Design, carry out, and report the results of a simple experiment to determine physical constants of nature.