

## Lyon College Course Syllabus Pandemic FA21

<b>Course:</b> phy390.01	<b>Physics Seminar</b>	<b>Phy390.03: T 11-12 Derby 148</b>
<b>Professor:</b> Stuart Hutton	<b>Office:</b> Derby 248	
<b>Email:</b> stuart.hutton@lyon.edu	<b>Office Hours:</b> MWF 10:00–10:50/AR	<b>Office Phone:</b> ***.307.7560
<b>Physics Email:</b> lyonphysics@*****.***	<b>Physics Web Gateway:</b> physics.lyon.edu	<b>Physics SMS:</b> 307.***.8765

### STANDARD POLICIES

#### Honor Code

All graded work in this class is to be pledged in accordance with the Lyon College Honor Code. The use of a phone for any reason during the course of an exam is considered an honor code violation.

#### Class Attendance Policy

Students are expected to attend all class periods for the courses in which they are enrolled. They are responsible for conferring with individual professors regarding any missed assignments. Faculty members are to notify the Registrar when a student misses the equivalent of one, two, three, and four weeks of class periods in a single course. Under this policy, there is no distinction between “excused” and “unexcused” absences, except that a student may make up work missed during an excused absence. A reminder of the college’s attendance policy will be issued to the student at one week, a second reminder at two weeks, a warning at three weeks, and notification of administrative withdrawal and the assigning of an “F” grade at four weeks. Students who are administratively withdrawn from more than one course will be placed on probation or suspended.

#### Disabilities

Students seeking reasonable accommodations based on documented learning disabilities must contact Danell Hetrick in the Morrow Academic Center at (870) 307-7021 or at danell.hetrick@lyon.edu.

#### Harassment, Discrimination, and Sexual Misconduct

Title IX and Lyon’s policy prohibit harassment, discrimination and sexual misconduct. Lyon encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to Lai-Monte Hunter, Title IX Coordinator and Vice-President for Student Life, or Sh’Nita Mitchell, Title IX Investigator and Associate Dean for Residence Life, about what happened so they can get the support they need and Lyon can respond appropriately. Lyon is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource (Chaplain, Counselor, or Nurse). As a faculty member, I am required to report possible Title IX violations and must provide our Title IX coordinator with all relevant details. I cannot, therefore, guarantee confidentiality.

#### College-Wide COVID-19 Policies for Fall, 2021

Masks are mandated for all students in classrooms, laboratories and studios. They remain optional for all persons on the Lyon campus in all other locations and outside. Participation in community surveillance testing is mandatory. Vaccines are STRONGLY encouraged for all faculty, staff, and students. Vaccines are NOT MANDATED for Lyon College community members.

# **Tentative Syllabus for Physics 390.01: Fall 2021**

**Professor: Dr. Stuart Hutton**

**Office: Derby Center: 248 Research Lab: Derby 219: General Physics lab: 148  
SMS: 307.\*\*\*.8765 / lab email: lyonphysics@<\*\*\*\*\*.com> web: physics.lyon.edu**

**Phone: \*\*\*.307.7560 Email: [stuart.hutton@lyon.edu](mailto:stuart.hutton@lyon.edu)**

**During class periods and during tests:  
cell phones are to be switched off.**

## **Grading**

**As a general guide to grades, grades will be assigned as follows:**

**A: [200-180). B:[179-160), C:[169-150), D:[149-130), F:[<130]**

**The final course grade may reflect subjective course aspects such as attendance and positive class participation.**

In this course, you will have several grading opportunities. The various weight of each of these activities in your final point grade is shown below. You are required to attend each seminar session. If you miss a session, your grade will be reduced by 10 points.

Each student will make unique presentations on the following dates:

Septemver 07

September 28

November 02

November 23

November 30

You will receive 20 points for each presentation for a total of 100 points. The presentations are expected to occupy 15 minutes with an additional 2 minutes for questions. The presentation of November 30 should require 25 minutes with 2 minutes for questions.

Students will work in the lab on the following dates

August 24

August 31

September 14

September 21

October 12

October 19

October 26

November 09

November 16

During the lab periods, students will be investigating the measurements that they will be using to construct technical presentations on the dates indicated. The lab work will be cooperative. You will receive 10 points for each lab period for a total of 90 points total.

Students will provide on November 30 unique compilations of all previous electrical work in electronic format. On this day, students will also present this compilation. You will receive 10 points for this.

The total points for the course are 200.

### **Course Description**

In this course, you will have an opportunity to gain experience with presentation of complex topics in physics. Topics will be at the level of each student's background in physics.

### **Course Objectives**

As a consequence of this course, you should obtain an enhanced understanding of the fundamentals of physics. In addition, you should come away from this course with an ability to discuss, among peers fundamental problems involving physical principles.

### **Course Prerequisites**

Students in this course must have completed or have credit for the following:

- (1) either Physics 210 or 240 (2) Physics 241
- (3) either Physics 220 or 250 (4) Physics 251  
or permission of the professor.

Text Book: There is no required text for this course.

You have many resources on the campus: the library, your colleagues and your professor. Your prime learning resource, however, must be considered to be the classroom: **punctual** and **complete** class attendance is expected and required.

**Punctual and complete class attendance is expected. Absences will negatively impact your final grade.**

### **Academic Honesty**

If you use reference work, **be sure to include proper references and these references must be visible during your presentation.** Your presentations must represent your unique work and thus simple copy and paste from sources is not permitted. Under the educational single use provision of copyright laws, you may at times use external material which is properly referenced in your presentation. Additionally you are expected to provide presentations that are unique; you may not simply replay presentations that you have previously presented. Practice talks in preparation for the weekly presentations are exempt from this requirement. You are, of course, permitted to ask me and your colleagues questions about presentations in their preparation. However the end result must represent your unique effort.

**CLASS SCHEDULE / OFFICE HOURS Fall 2021**  
**Pandemic Part 2 Version**

**Professor: Stuart Hutton**

Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:50 PHY240.01 Fundamentals of Physics I	8:00-9:15	8:00-8:50 PHY240.01 Fundamentals of Physics I	8:00-9:15	8:00-8:50 PHY240.01 Fundamentals of Physics I
9:00-9:50 PHY210.01 General Physics 1	9:30-10:00	9:00-9:50 PHY210.01 General Physics 1	9:30-10:00	9:00-9:50 PHY210.01 General Physics 1
10:10-10:50  Office Hours	10:00 - 10:50	10:10-10:50  Office Hours	10:00 - 10:50	10:10-10:50  Office Hours
11:00-11:50	11:00-11:50  Phy390.01 Seminar	11:00-11:50	11-11:50	11:00-11:50
12:00-12:50	12:00-12:50	12:00 - 12:50	12:00 - 12:50	12:00 - 12:50  SGA
13:00-15:50	13:00-14:50	13:00-15:50 PHY241.01 Fundamentals of Physics Lab 1 Derby 148	13:00-15:50 PHY241.01 Fundamentals of Physics Lab 1 Derby 148	13:00-15:50 PHY241.02 Fundamentals of Physics Lab 1 Derby 148

## Tentative Schedule for Phy390.01 FALL 2021

Date	Event	presentors
August 17	Class Organization <b>Introduction of</b> Electrical Measurements	SH
August 24	DC Conductivity Measurements	
August 31	DC Conductivity Measurements	
September 07	<b>Presentation of</b> DC Conductivity <b>Introduction of</b> DC Dielectric Measurements	WK,JW,SH
September 14	DC Dielectric Measurements	
September 21	DC Dielectric Measurements	
September 28	<b>Presentation of</b> DC Dielectric Measurements <b>Introduction of</b> AC Impedance Measurements	WK,JW,SH
October 02 - October 05	Fall Break	
October 12	AC Impedance Measurements	
October 19	AC Impedance Measurements	
October 26	AC Impedance Measurements	
November 02	<b>Presentation of</b> AC Impedance Measurements <b>Introduction of</b> <b>Sawyer-Tower Circuit</b>	WK,JW,SH
November 09	Sawyer-Tower Circuit	
November 16	Sawyer-Tower Circuit	
November 23	<b>Presentation of</b> <b>Sawyer-Tower Circuit</b>	WK,JW
November 30	<b>Compilation of</b> <b>presentations</b>	WK,JW

## Physics 390: Seminar Presentation Rubric Fall 2021

Category	3	2	1	0	Totals
<b>Preparedness</b>	Student completely prepared and has clearly rehearsed	Student is mostly prepared but could have rehearsed more	Student is somewhat prepared but should have rehearsed	Student is unprepared	
<b>Speaks Clearly</b>	Speaks clearly and distinctly during entire presentation. Makes good contact with audience.	Speaks clearly and distinctly most of the time, a few words poorly said or misused. Makes good contact with audience.	Difficult to hear and understand most of the time and little contact with audience	Mumbles and / or can not be understood. Avoided contact with audience.	
<b>Visuals</b>	Pdf, board work, and other props appropriate and correct.	Pdf, board work, and other props mostly appropriate with a few shortcomings including incorrect physics.	Pdf, board work, and other props relatively few and some may not represent correct physics.	Pdf, board work, and other props poorly done, with incorrect physics presented.	
<b>Time Limits</b>	Presentation of appropriate length, including time for questions.	Presentation too short or too long. time for questions ok.	Presentation way too short or way too long. time for questions ok.	Presentation way too short or way too long. time for questions not ok	
<b>Comprehension</b>	Student accurately answers all reasonable questions. Student shows full understanding of topic.	Student accurately answers most reasonable questions. Student shows good understanding of topic.	Student accurately answers some reasonable questions. Student understanding is shaky on parts of topic.	Student can not accurately answer reasonable questions. Student does not really understand topic.	
<b>Participation</b>	Listens intently, asks good, relevant questions pertaining to the presentation.	Does not always listen and/or may ask irrelevant questions.	Listens but did not ask required questions.	Does not listen, shows interruptive behavior (including late arrival). Questions not asked or are irrelevant.	
<b>Attendance</b>		Student arrives on time and is present throughout all presentations.		Student misses any portion of seminar.	

**Note that the maximum score per shorter presentation is 20 points. In the final grade calculation, the sum from all shorter presentations is scaled to give 10 points per shorter presentation in the final grade.**

## **Safety regulations for General Physics Labs Fall 2021 Pandemic Version**

**At all times in the labs, students must properly wear face masks.**

**Correct social hygiene must be practiced at all times in the lab. Students are responsible for sanitizing work areas (including equipment) before and after lab.**

- (1) Anytime springs are used in lab, safety goggles must be worn.
- (2) Anytime boiling water is used in lab, safety goggles must be worn.
- (3) You should not look at laser light or point it towards other people.
- (4) In the event of a spill (which will be water), dispense a towel from the spill kit (aka towel dispenser) and wipe up the spill.
- (5) Food and drink are not permitted in lab.

### **College-Wide COVID-19 Policies for Fall, 2021**

- (6) Masks are mandated for all students in classrooms, laboratories and studios. They remain optional for all persons on the Lyon campus in all other locations and outside. Participation in community surveillance testing is mandatory. Vaccines are STRONGLY encouraged for all faculty, staff, and students. Vaccines are NOT MANDATED for Lyon College community members.

Attach this form to your email (as an extra attachment today) when you send in your introductory lab report. In your lab report, right below your name, you should say this:  
I have read the safety regulations attached to this email.

## Student Learning Outcomes for the Physics Program at Lyon College Fall 2021

1. Students who complete physics seminar (Phy390) are able to:
  - 1a. give short technical presentations over topics from general physics.
  - 1b. investigate topics in other areas of general physics and provide short technical presentations over these areas.
  - 1c. investigate one topic in greater depth, providing a formal paper covering an in-depth presentation. The formal paper will consist largely of notes accompanying an in-depth 25 minute presentation.
  - 1d. experience being attentive listeners and to be able ask physically relevant questions in an audience of peers.
  - 1e. construct simple electronic presentations for a technical audience of peers.