

# $\ \, \textbf{Lab Policies and Guidelines} \\ \text{$^{1110}$ and $1120$ E term $2021$}$

Last Edited May 24, 2021

#### I. Welcome to the labs!

Welcome to physics 1110/1120 labs! You will perform 5 labs this semester, fully remote and asynchronous if you cannot make our lab time.

#### II. Schedule for the Labs

First Monday of that week	Week of the semester	Assignment	Due date	
24 May 2021 E1	1	Python Intro // Lab Rules		
31 May 2021 E1	2	Lab 1R	7 June	
7 June 2021 E1	3	Lab 2R	14 June	
14 June 2021 E1	4	Lab 3R	21 June	
21 June 2021 E1	5	Lab 4R	28 June	
28 June 2021 E1	6	Lab 5R	5 June	
5 June 2021 E1	7			
12 June 2021 E2	1	Lab 1R	19 June	
19 June 2021 E2	2	Lab 2R	26 June	
26 June 2021 E2	3	Lab 3R	2 August	
2 August 2021 E2	4	Lab 4R 9 August		
9 August 2021 E2	5	Lab 5R 13 August		

Figure 1: This is the schedule for when the labs will be performed this semester. If you are fully remote your labs will end in an R. Students are required to agree to the lab rules (Lab Rules Quiz on Canvas) before they can access the remote labs.

#### III. In person students policies

#### III.1. In person safety

There will be rigid, uncompromising policies on in person interactions and safety in lab. Lab Instructors have full discretion to decide on what violates these policies, and students who do not comply with these safety standards will receive a zero for this lab. This is for your safety and the safety of your peers.

If you pass the safety quiz you can come to lab, it you do not pass the safety quiz you cannot come to lab.

These standards are:

- Wearing a mask the whole time one is in lab.
- Cleaning your work space before and after lab with sanitizing wipes and sprays.
  - At the beginning of class grab a spray bottle and some paper towels. Then take them back to your station and spray everything you expect to touch (Keyboard, mouse, your chair). Do not spray the electronics.
  - Then wipe them down, or let it sit for a few minutes. See the next point for more information about why you may wish to let the cleaning agent sit.
  - At the end of class spray down all the things you touched (the table you sat at, the keyboard, mouse, your chair) and then **do not wipe it off with a paper towel**. In truth these cleaning agents require 10 minutes of application to achieve full efficacy. Therefore, as we are trying to end class on the 40 minute mark rather than the 50, (aka 20 minutes before the next class) this way we have time for you to leave the cleaning agent sitting on the 'dirtied' area before the next class.
- Staying 6 feet away from others, and respecting peoples space if they ask you to 'stay back'.

This semester we have moved the sections around so that there are only 12 students in each section. That means that we can offer every lab in person for those who are on or near campus.

#### IV. Open Lab

If you need extra lab time OH 117 will be open from 3-5 on Friday's. Please remain respectful, safe, turn on the fans, and only 12 students are allowed in the room. If you have any issues in lab, and your Lab Instructor is not available please either email Dana (ldana@wpi.edu), or knock on their door (Olin 125 next to the elevator). There will be no lab instructor there to help you during open lab, but you may work with the equipment and computers to take extra data, or use logger pro if you need to.

### V. Remote student policies

You will have your own section, so please if you are fully remote and not in the fully remote section (PH 1120 section 13 and 14) please email the lab manager Dana (ldana@wpi.edu). Your course instructor will hold lab hours twice a week. You are required to go to one of these meetings, not all. Please see Fig. 1 for when you are due to work on a lab in those zoom hours, and Fig. 1 for when one's lab reports are due.

#### VI. Extensions

All students should email their Lab Instructor to ask for extensions. If a student emails before the deadline they get an automatic day extension, no penalty. After that day, or if a student does not email, your lab report loses one point per day. There are no possible extensions past the Friday before the term ends. If the term ends on a Friday, then the Friday before that one is the last possible day for an extension. For extensions you should email your request towards your Lab Instructor.

If you need an extension for a religious holiday please feel free to reach out! We will happily move around when the labs are due or even when you can access the labs to perform them. If there is a restriction on the room for performing the labs or trouble rescheduling you are also welcome to perform the remote labs with no penalty.

If you ask and receive an extension please know it may take your Lab Instructor longer than the normal 1- 2 weeks to grade your lab report.

An example extension request is below. If you are having trouble with any specific aspect of the lab please include it in your email. If it is a python question please provide screenshots of your code.

Hello (Insert what your Lab Instructor has asked to be called here. If you're not sure you should copy their signature),

I'm sorry to email you, but I don't think I am going to finish the lab by the deadline. I have had this specific issue with the lab, and (then explain the issue you are having with the lab).

May I have another day (or three) to continue working on the lab?

Best,

Student Name

#### VII. Reaching Out

If it is a question about a lab concept, such as help with Python or a homework question please direct that towards the Slack channel.

All extension requests should be emailed to your Lab Instructor. Our general working hours are from 9 - 4pm, Monday through Friday, and we typically respond within two working days. If you email on the weekends or after hours you will not necessarily hear back until the next working day.

If it is a question about lab scheduling please ask your Lab Instructor's first, and then ask the Lab Manager (ldana@wpi.edu) if they don't know.

If it is a personal or sensitive topic please feel free to reach out via email to your Lab Instructors or Lab Manager. This includes requests for accommodations, grading issues or concerns about safety in lab. If you have **any** concerns about in person safety please email Dana (ldana@wpi.edu). We take issues of COVID and personal safety very seriously.

Dana has office hours Friday 9:30-10:30 at this link. The password is 314. Students who come to office hours with administrative questions will be given priority, but if you wish to ask for help with the lab themselves that's fine. Dana cannot not help you with homework or the quizzes. Dana also know nothing about Mastering Physics or Pearsons or any other software that's not working.

If you have questions about the labs please do **not** contact your conference instructor or course professor, please contact your Lab Instructors or Lab Manager.

#### VIII. Accessibility

Please reach out to the Lab Manager (ldana@wpi.edu) if you want to talk about accessibility of the labs. We understand that traditional labs and education systems are not always disability friendly, and we are committed to helping every student succeed. We are happy to support students with physical, learning, sensory, psychological, developmental, and other disabilities in achieving their full potential.

#### VIII.1. Accessibility statement from WPI

Students with approved academic accommodations should plan to submit their accommodation letters through the Office of Accessibility Services Student Portal. Should you have any questions about how accommodations can be implemented in this particular course, please contact me as soon as possible. Students who are not currently registered with the Office of Accessibility Services (OAS) but who would like to find out more information regarding requesting accommodations and what that entails should plan to contact them via email: Accessibility Services @wpi.edu and/or via phone: (508) 831-4908.

## VIII.2. Possible Accommodations (NOT EXHAUSTIVE)

- Logger pro offers assistance if you are low vision.
- If you need more time or a quieter space to finish a lab we have open lab hours. There might not be a TA there to help, but Dana is across the hall if anything goes wrong.
- If you miss a lab please contact your TA or Dana, often we will either ask you to go to open lab hours, or perform the associated remote lab.
- Please feel free to take breaks during lab, and you do not have to ask your TA if you can leave.
- If you're having trouble hearing your TA or peer's they will be happy to speak up, or we can search for other options.

#### VIII.3. Lab Rules

- Lab materials (including Canvas quizzes) are due at noon on the day they are due, according to the schedule above.
- Lab partners cannot have identical answers to theoretical questions (the questions where we require you to write a few sentences), and we would consider answers that are exactly the same academic dishonesty.

- Do not send other students your lab reports, even your partner or your friends. If someone copies the lab report you sent them you can also be help responsible for an academic honesty violation. It's not fair, but it is the situation we find ourselves in. If another student needs help with the python code send that separately, do not send your whole lab report.
- Students should share their data taken in lab with their lab partner, but for remote labs they should always try and take their own data first. Please consult with your Lab Instructor if there is a reason you cannot take your own data, for both in person lab and remote labs. If so we will either provide you with data to analyze, or ask your lab partner to share with you.
- Students who work together need to include their partners names at the top of their worksheets. Even if you were not assigned a partner, but just worked with a friend, you should include their name. If you have concerns about what can be considered academic dishonesty please talk to your Lab Instructor! You will not be punished for asking!
- Additionally you should perform any analysis individually. You may consult and help other peers, but you should do your own graphing, data processing, and statistics. If your code looks a lot like the resource code that's okay, but you should be running your own code, and not asking a peer to run it for you. Students are expected to make their own graphs, and not share graphs. The only exception is Logger Pro graphs that students format together in class.
- Labs must be submitted on Canvas as a PDF file. Please convert your lab into a PDF before submitting your lab. Each partner must submit their own copy of the lab on Canvas. Though numerical data and calculations may be shared between partners, any conceptual questions must be answered separately. If you are not sure whether a question qualifies as conceptual, ask your Lab Instructor. Identical lab reports will receive a grade of zero for both lab partners! After you submit your lab, check whether your lab was correctly uploaded and that it is not blank or corrupted.
- You must show all work, such that someone reading your lab would be able to replicate all of your calculations. Make sure that all your axes are labeled and all labels are big enough to be read when you copy them into your lab report. In LoggerPro, this is easily accomplished either by shrinking the graph before you copy it or by increasing the font size. Every answer should use the appropriate number of significant figures, including uncertainties. Answers given without units will not receive full credit.
- No food or drinks are allowed in the lab room at any time.
- Attendance: For fully remote students you will have a 'synchronous lab' period week. You are required to attend one and check in with your Lab Instructor. You are not required to stay for the whole period, but you must check in with your Lab Instructor. We will assign lab partners based on a pre-lab survey, and we encourage, but do not require, you to work with your lab partner.
- Attendance: For in person students your schedule can vary, but if you are assigned in person lab for that day you must email beforehand if you cannot attend.
- Your physics grade may depend on completing all of the labs in this course. Failure to complete labs may result in an NR for your course. See the requirements for lab above and be proactive.
- You do not need to ask to go to the bathroom. Please feel free to get up, take a break, go for a short walk whenever you wish.
- Please know that lab ends on the 40 minute mark, so please try and keep any (recommended) breaks you take short enough that you finish your entire lab.
- You should never need to buy anything for physics lab. If you're concerned about acquiring a material for lab please reach out!

## IX. Academic Honesty

Please review WPI's policies on Academic Honesty. What this means for lab is that your words and your work should be your own. This is covered more explicitly in the Lab Rules section, but we take this issue very seriously.

If a violation is egregious enough then we will consider kicking a student out of lab, and not letting them finish the course.

## E1 and E2, summer 2021

Semester	Class	Lab Instructor	Email	# students	Professor
E1	Mechanics	Pengbo Wang	pwang3@wp i.edu	23	Izabela Stroe
E1	E&M	Jiazhang Chen	jchen14@wp i.edu	12	Rudra Kafle
E1	Waves (1140)	Ed Jarvis	ejjarvis@wpi. edu	7	Hektor Kashuri
E2	Mechanics	Emily Sutherland	egsutherlan d@wpi.edu	11	Hektor Kashuri
E2	E&M	Aaron Pilarcik	ampilarcik@ wpi.edu	20	Snehalata Kadam
<b> E</b> 2	Modern	Matthew Jalbert	mrjalbert@w pi.edu	13	Hektor Kashuri
Both	All Python help	Amelia Nishimura	anishimura @wpi.edu		

<sup>\*</sup>All classes and labs are remote this term

Figure 2: Here is a list of Lab Instructor's and their sections. Their emails are across from their names.