

The University of Texas at El Paso
<http://science.utep.edu/physics/>

Syllabus Mechanics Fall 2023

Physics Lab



Last edited 07/24/2023

Courses:

PHYS 1403: General Physics I

PHYS 2120: Laboratory for PHYS 2320

Generals:

Location:

Physical Sciences Building (PSCI). Rooms 316 & 322.

Laboratory Coordinator:

Karla Carmona Miranda, M.S. Email: kcarmona@utep.edu

Overview:

PHYS 1403: This lab is an integral part of the physics course. Concurrent enrollment in a lecture section of physics is required and mandatory. Each lab section meets once a week for 1 hour and 50 minutes. The credit of this course will be reflected as a component of the final grade of your lecture's grade.

PHYS 2120: This lab is a one credit physics course. Enrollment to a lecture section is optional. Your final grade will be show in your transcript as a letter grade

This portion of your physics course will cover cherry-pick concepts from your lecture. **The labs start meeting on the week of September 11th.** The selection of concepts is based on the ability of the problems to be a live-action representation of your textbook and homework problems. Our goal is for you to gather and practice some problem-solving skills, teamwork abilities, and a professional presentation of your work.

The lab will have ten (10) problems to solve, one per week. The problem-solving and teamwork abilities will be evaluated upon results delivered at the end of the lab session. The presentation of your work will be assessed with a report.

Lab Manual:

The lab manual will be on Black Board (Bb) this term. Your Bb course can be accessed via your laptop or mobile device and provides you with a place to find activities to be ready for the lab work, the lab instructions to perform the experiments, and a place to submit your attendance and lab report. Unlike a traditional paper lab manual or notebook, Bb features automatic date and time stamps on all modules and activities; it also can be updated by your instructors to provide you with comments, and your grades will be stored there. Check your account regularly!

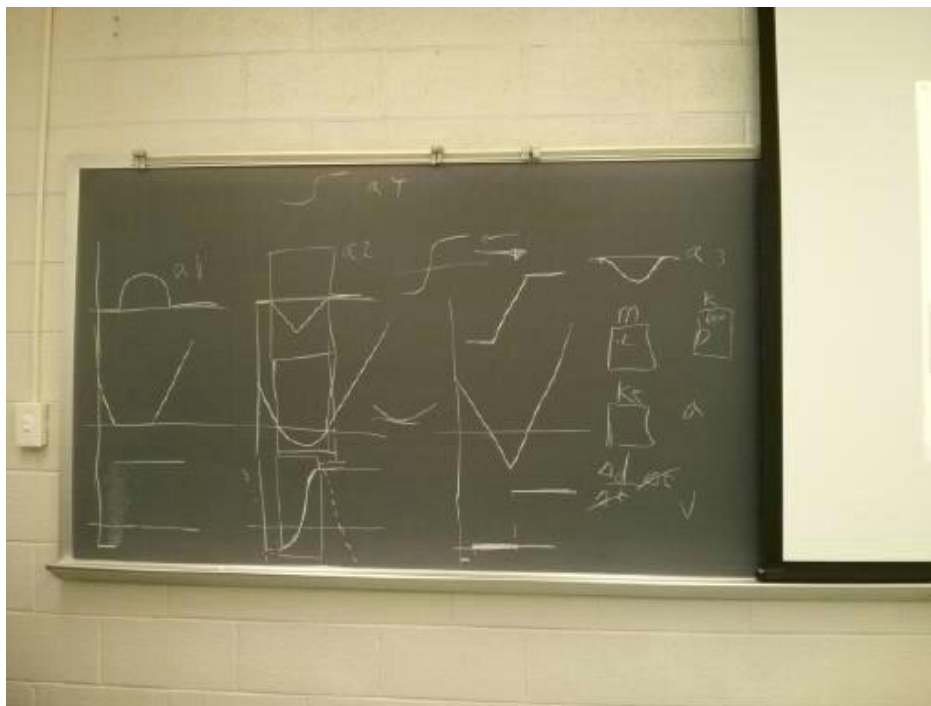
The lab will have 10 different lab problems to solve, each one per session.

Before we start tips:

Because we will have almost all our communication online, and every assignment and gradable interaction will be on Bb, I recommend that you read these UTEP resources to be ready for online learning.

- [Are you ready for online learning?](https://www.utep.edu/extendeduniversity/cid/student-resources/index.html)
 - <https://www.utep.edu/extendeduniversity/cid/student-resources/index.html>
- [Ten rules of netiquette for students.](https://www.utep.edu/extendeduniversity/utepconnect/blog/october-2017/10-rules-of-netiquette-for-students.html)
 - <https://www.utep.edu/extendeduniversity/utepconnect/blog/october-2017/10-rules-of-netiquette-for-students.html>

Assignments, grading, and final score.



The lab will have three types of tasks:

- A simple two (2) questions quiz will grade your pre-lab activities.
- The lab attendance and participation will be marked with a selfie delivered as an assignment in Bb.
- Your lab report will be graded according to the rubric posted in Bb.

Each task will be graded with a points scale:

- Twenty (20) points for the quiz
- Twenty (20) points for attendance and participation
- Sixty (60) points for each lab report

Your final lab grade or score will be computed by adding all your points (including extra points earned during the lab session) and dividing them by ten. Please, note that the Bb overall grade or total column color does not reflect the actual status of your lab grade.

Quiz:

The questions here will be based on the information provided by the videos, documents, reading assignments, etc, at the beginning of each module. They will be open from day one and available for you to work on them. **The due date will be the day of the lab at 7:00 AM.** You will not be able to start the quiz after the due date, and there will be no late submissions for them. Please do not request that a quiz be reopened; the answer will be no. The quizzes will not have a time limit to complete them, and you

will have up to five (5) attempts to get the maximum number of points. Only the highest score will be kept. If you consider there is an error in the question's grading, please, email the lab coordinator with the question and your train of thought to justify your answer.

Attendance:

On the board inside the lab will be a frame with the CRN of the class and the date. To mark your attendance, you will take a selfie where your face, the CRN, and the date are visible and upload it as an assignment in the Bb area set for it. ***The due date for each lab attendance will be the day of the lab at the end of the day (11:59 PM).*** This assignment will be open for *five (5) days* after the due date for any late submission needed. Notice that you won't be able to upload any pictures after that time because the assignment area will no longer be visible to students.

Lab Report:

A lab report is an individual document you will write from scratch. Each lab report must contain an introduction, materials and setup, procedure, data and data analysis, conclusions, and personal learning experience. Each section will have a title or some feature that delimits its content, which means that the grader must be able to identify each section with a glance at the document. Areas like materials and setup, procedure, and data and data analysis must contain pictures, tables, graphs, sketches, or other visual tools to clarify the posted information.

- **Introduction.** An overview of the experiment and the physical concept used or analyzed in it.
- **Materials and Setup.** A description of the materials and the initial conditions of the experiment in the lab.
- **Procedure.** A description of trials, variables that were changing or held constant through the experiment, type of data collected, and any predictions made.
- **Data and Data Analysis.** The student will present the data gathered and the operations done to it in a visual and orderly form. This form includes using tables, graphs, descriptions for the charts and tables, formulas, and highlights for results or essential values.
- **Conclusions.** A paragraph summarizing the answers to the central questions in the activity, supporting each statement with the data shown in the previous section.
- **Personal Learning Experience.** In a couple of sentences, the student will express what significant thing they learn in the section, which can be from the lab activity, the interaction in the lab room, or while writing the report.

The due date for the lab report will be three days after the lab day at the end of the day. Please, check your Bb calendar for specific and exact due dates for each lab report. You will have *five (5) days* after the due date if you need to deliver your lab report as a late submission. After those five days, the assignment area will become invisible to students and will not be reopened for any reason. Late submissions will have a deduction of points.

The lab report is null (not graded) if the attendance assignment has no submissions.

Attendance to the lab is mandatory, and is your ticket to have your lab report graded.

Lab Waivers:

A lab waiver will be processed when an excused absence happens. It will be only a maximum of two excused absences per term. You must bring to the lab coordinator's office a printed copy of your excuse letter (doctor's note, emails from COVIDAction with your name on it, department's letter in case of an official UTEP event, court orders, military schedule, lab tests, etc.) The zeros will be shown in your Bb grades, but at the end of the semester, you will notice that your total is divided by nine (9) or (8) instead of ten (10).

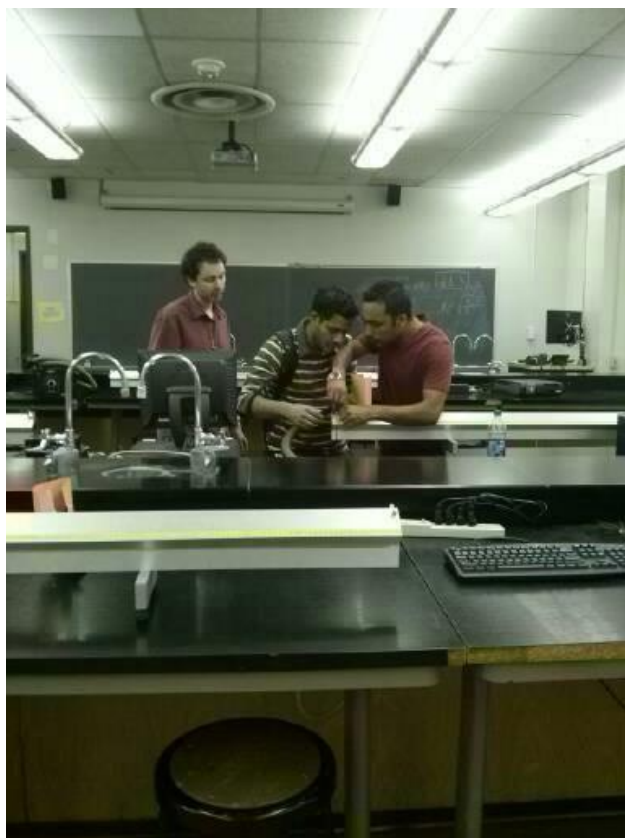
Warning: The COVID home tests will not be accepted as an excuse letter.

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID 19 testing.

For suspicion of having COVID-19, doctor's note or lab test results will be accepted as a paperwork to waive the lab. Home test will not be consider as paper work to waive the lab, but the emails from covidaction@utep.edu to start isolation and the release to attend class again will be accepted.

We will not accept files for grading outside the Blackboard's submitting area.

General Advice to Succeed In the Lab



Individual and teamwork skills:

This lab will help you sharpen your teamwork skills. Group discussions during the laboratory are highly encouraged. However, each member of the group is required to write down his/her own measurements, perform his/her own calculations, and write an individual laboratory report. Because independent thinking and independent work are also important skills to develop, you are required to be active in all the laboratory sessions and to prepare your own lab reports.

Advice:

You are strongly encouraged to ask questions while performing the labs. We hope to create an atmosphere that is conducive to learning and where no question is a “stupid question”. Often several students will have the same or a similar question, so feel free to listen to the instructor when he/she is answering someone else’s question. You may find that you can save time this way instead of waiting for the instructor to become available on a busy day. Occasionally, the scheduled lab experiment will cover material that has not yet been covered in the lecture. The lab instructors will make an effort in their introductory remarks to compensate for such mismatches, but in these cases you will find that it is

especially important to read and understand the pre-lab and lab experiment before you come to the lab, and to ask for clarification of any questions you have. You will also find your course textbook to be a valuable aid under such circumstances, and you are encouraged to use it to help you understand the material presented in the lab.

Resolving Grading Disputes:

If you feel that an assignment has been graded unfairly, you should first consult with your lab instructor. If you are still unsatisfied, you may bring the matter to the attention of the lab coordinator. We are aware that we all make mistakes, and we can definitely review a questionable assessment. However, please keep in mind that while it may happen that we find your score was indeed too low, we may also find that we missed a mistake and that your score was too high.

Required and recommended materials:

The material for this course will be in blackboard, also space to collect data will be posted there, so is very important that you bring your own laptop or printout the worksheet for the lab.

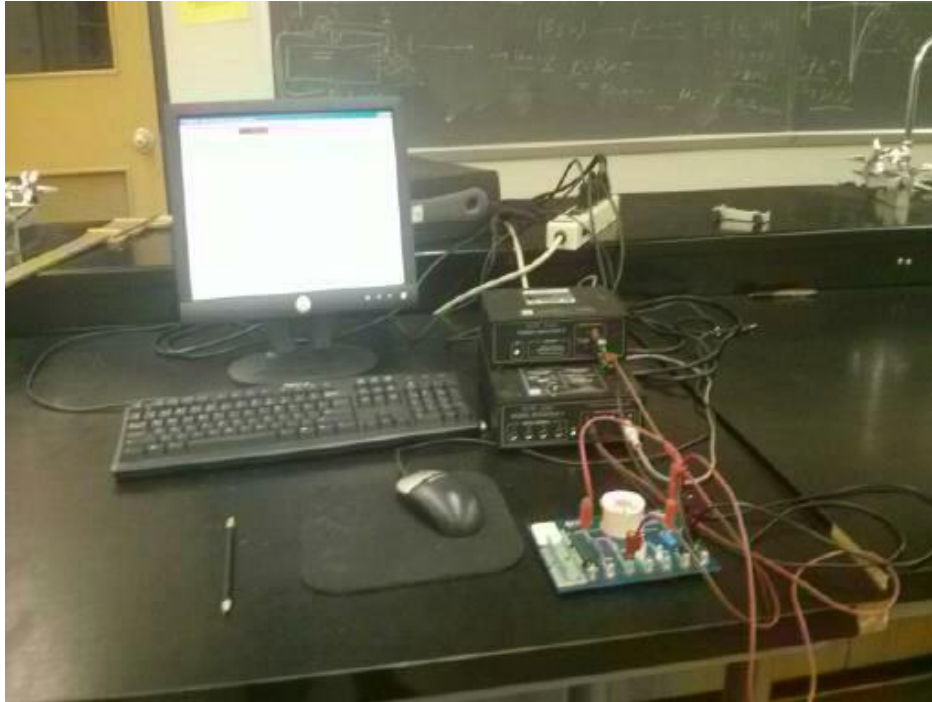
To do research for answering the prelab activities is encourage that you use the search engines in Google, YouTube and Wikipedia, also is very useful use the textbook for the lecture or any physics book that you can find in the library.

Communicating Effectively:

Learning online is not a spectator sport. It is everyone's responsibility to participate as fully as they can so everyone can get the most from the experience. Here are some simple tips to follow to ensure your participation and engagement in the learning process:

- **Ask questions:** If you don't know the answer, someone else will. The discussion board is the area for asking questions related to content OR any problems, related to the class, you are having. Make sure that you have clearly indicated the subject of your message.
- **Reach out to others:** Offer a fact, article, link or other item that can help others learn something you can share.
- **Be appropriate:** The online classroom is not the place for insulting or insensitive comments, attacks, or venting. Inappropriate behavior will usually subject to disciplinary action, as well.
- **Be diplomatic:** When sending messages on emotionally charged topics, make sure you write the message and then walk away for at least an hour before rereading the message and then sending it. Re-reading emotionally charged messages ensures that they are constructive instead of destructive. Think of the person at the other end.
- **Stay focused:** Stay on topic to increase the efficiency of your learning.

General Policies



Safety Policies:

1. Positively **NO** drinking or eating of any kind of foods is allowed for **ANYBODY** in the laboratory.
2. **COMPUTER POLICY:** The PASCO software that we use in this laboratory can be very sensitive to the way in which the Windows operating system is set up. Because of this, please **DO NOT** make any changes to any of the Windows settings, no matter how inconsequential the change may appear to be. Please use the Windows settings in their current configuration only. Please **DO NOT** load any new software on to the computers in the labs. Please also **DO NOT** delete any files from the laboratory computers.
3. **LAB STATION POLICY:** At the beginning of each lab, you and your lab group are responsible for turning on the lab equipment and turning it off at the end of the lab. At the end of each lab, you are responsible for leaving the equipment at your work station in the same condition in which you found it. This means that you will leave all instruments, and the computer, in the **OFF** mode. If anything has been broken or damaged during the lab period, please let the lab instructor know about it, so that it may be fixed or replaced before the next lab group arrives.

Statement for (N)etiquette:

When communicating electronically, many of the feelings or impressions that are transmitted via body language in face-to-face communications are lost. Consequently, interpreting emotions and innuendos is much more difficult. Only what is written, or drawn, carries the message. Often, excitement can be misinterpreted as anger or insult. It is important that we all keep this in mind as we communicate. Words in print may seem harmless, but they could emotionally injure us when working at a distance. Hence, it is vitally important that we are conscious of how we communicate while working at a distance.

For example, avoid the use of caps in your electronic messages, as wording in caps comes across as shouting. The standard practice ("Netiquette") for participation in networked discussion requires that all participation be focused on the topic at hand, not become personalized, and be substantive in nature. (Translation: you may certainly disagree with others, but you must do so respectfully; you may express strong beliefs or emotions, but you may not get so carried away that you lose all perspective on the course itself.)

Please observe the following:

- You are required to check the Blackboard course shell daily for messages, updates and assignments.
- Respect and courtesy must be provided to fellow classmates and the instructor at all times, in all contexts. No harassment or inappropriate postings will be tolerated.
- Be professional and careful in what you say about others.
- When reacting to someone else's message, address and focus on the ideas, not the person who posted them.
- Be careful when using sarcasm and humor. Without face-to-face communications your joke may be viewed as criticism.

Communication Statement:

I will be checking in on Blackboard every weekday mornings. Please allow me 24 hours to respond to discussion board postings and/or e-mail. If you send me a message an hour before an assignment is due, I will not be able to respond or help you.

Statement for Academic Integrity:

The International Center for Academic Integrity, comprised of a consortium of universities worldwide, defines academic integrity as "a commitment to fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behavior that enable academic communities to translate ideals into action." As they relate to students, these values can be defined as follows:

Honesty: "adhering to standards of truthfulness and integrity"

Trust: participating in "an environment of confidence"

Fairness: abiding by the "standards, practices, and procedures" outlined by your instructors and institution

Respect: "encouraging a wide range of opinions and ideas"

Responsibility: assuming personal accountability and accepting sanctions in cases of misconduct.

Students are responsible for adhering to the above standards in all academic activity and refraining from all forms of academic dishonesty. According to the **UTEP Handbook of Operating Procedures**, academic dishonesty includes committing (or attempting to commit) the following:

- **Plagiarism** – taking credit for work that is not your own (e.g., copying and pasting from the internet, failing to cite sources of information, failing to attribute direct quotes to their original author, or submitting your work from another course without prior permission).
- **Cheating** – This includes copying another student’s work during an exam; using notes, books, or electronic devices during an exam without prior permission; taking an exam for another student; and communicating with or helping another student during an exam.
- **Collusion** – any collaboration with another student without the permission of the instructor.

General University Policies:

1. The Academic Integrity Policy is cited at <http://academics.utep.edu/Default.aspx?tabid=23785>
2. Disability Statement: If you have a disability and need classroom accommodations, please contact the Center for Accommodations and Support Services (CASS) by phone at 747-5148, by email at tocass@utep.edu, or by visiting their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass. It is important to talk to the lab coordinator once your accommodations are granted and before a problem is presented.
3. Military Statement: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact the laboratory coordinator as soon as you are called.
4. In all other matters not discussed above, The University of Texas at El Paso’s university-wide policy supersedes all other laboratory policies.