

SimpleMechanics
Protocols/Syllabus

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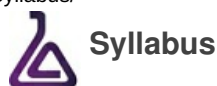
Karla Miranda

on

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THE UNIVERSITY OF TEXAS AT EL PASO

DEPARTMENT OF PHYSICS

PHYSICS LAB SYLLABUS

Physics 1403/2420
'15

Term: Fall

Location:

Physical Sciences Building (PSCI), Room 316/322

Enrollment:

Concurrent enrollment in a lecture section of physics and in case of 2420 a workshop also. Each lab section meets once a week for 1 hour and 50 minutes. This lab is an integral part of the physics course. To get credit for this course you must be enrolled in one and only one laboratory section in addition to one and only one lecture section.

Laboratory Coordinator:

Name: Karla Carmona Miranda, M.S.

Room No. : 312-C (PSCI)

E-mail: kcarmona@utep.edu

Phone No. : (915)-747-7549

Laboratory Manual:

Every student in the laboratory must **purchase** a lab manual.

LabArchives is the Electronic Lab Notebook (ELN) which we will use for this course. It provides you a place to record observations & results of experiments - via your laptop or mobile device with automatic date & time stamps - and find course information. Unlike a paper lab manual or notebook, I can update it & provide you comments at any time... so be sure to check your account regularly!

To get started look for the welcome e-mail from **LabArchives** with the link to access your copy of the notebook for the course. Click on the link to choose a password.

The service gives students a 2 week grace period before requiring a \$10 payment. To assure read/write privileges for the full semester simply pay from within your account using a credit card or Paypal. If you have any questions write to support@labarchives.com

LabArchives 101: While the interface is quite intuitive, to help save students time there is a short YouTube video which I strongly recommend you go ahead & take the 4 minutes to see: <http://www.youtube.com/watch?v=DmMd0AA8GG4>

For more details, download the [Quick Start Guide](#) for students.

To access your account via a browser, bookmark <https://mynotebook.labarchives.com/login> & if you will also be using a tablet or smart phone, download the most recent version of the **iOS** or **Android** app (& check for regular enhancements)

Have a technical question during the semester? Search the [Help page](#) for an answer, review the series of short videos on the **LabArchives YouTube Channel** or write/call their customer support.

I hope that you enjoy using this new, green alternative to paper notebooks & look forward to getting your feedback!

Note: at the end of the semester you can download a copy of your notebook to your computer (or print it) for permanent access. This notebook will remain accessible in your account if you take other lab courses using LabArchives.

Things to bring to the lab:

Each student will have with them a scientific calculator, pens, pencils, laptop or tablet or smart phone to access the manual, notebook, USB flash drive and any paper for recording data and laboratory information.

Tentative lab scheduling:

Lab # 1	How to use Lab Archives / Lab Equipment
Lab # 2	Constant Velocity
Lab # 3	Constant Acceleration
Lab # 4	Projectile Motion

Lab # 5	Inclined Plane
Lab # 6	3rd Newton's Law
Lab # 7	Atwoods Machine
Lab # 8	Collisions
Lab # 9	Friction
Lab # 10	Harmonic Motion

Guidelines for success in this lab:

Attendance & participation: Attendance and participation is very important for the laboratory work. Every student must attend and be an active participant in each and every laboratory session. Each team member should record the data and answer questions individually. It is highly recommended that you show your results to the lab instructor before you leave the lab. It is also recommended that you have a hard copy of the data. In case you need to finish entering your lab work at home in the ELN. **No active involvement with the lab activities can generate a sanction, which can range from points off to a total zero in the lab, at your Instructor discretion.**

Lab reports: For each lab, students will write up one or two paragraphs answering each question “**What do you think was the objective of this lab? What significant thing did you learn today?**” Students will submit their lab report along with the respective lab work at the end of the lab or before midnight on lab day, in case of technical problems.

Lab work: Students will perform the experiments in a group. The worksheet and the reports generated in the search for answers will be delivered as a group. Students must use their own words to answer these questions, since these pages are going to be graded as lab work. Note that all the write-up questions must be completed on lab day. *Considering technical problems or other situations out of the student's and TA's hands, the submission of the lab work will be 12 hours after the lab is over.*

Pre-Lab: Pre-Labs cover a little of the theory you will be working on in each Lab. It is important to do it before the lab begins. If you have questions, the tutoring center is available, email your TA or come to the Lab Coordinator's office. Therefore it is important you do not leave this homework to the last minute. Also, if something was not too clear you should ask those questions at the beginning of the relevant lab.

Grading Policy: **[Lab report-10%, Lab work-70% and PreLab's Quiz -20%]** Each lab report will be graded on a scale from 0 to 10, each pre-lab will be graded by a pop quiz at the beginning of the lab with a scale from 0 to 20 and each lab work will be graded on a scale from 0 to 70, with points taken off for errors detected in the labs. *The final grade for the lab will be calculated adding all three grades.* Taking into account there can be technical problems, you and your team will have 12 hours after the lab ends to submit the work on the ELN. Late submission policy: grades will be given at your Instructor discretion. **Please note that the lab report and lab work for a missed lab will not be accepted for grading.** For a Pre-lab there are no late submissions.

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

Advice: You are cordially 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 if 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. Also, you may find that it has been necessary to schedule some experiments before the relevant material has been covered in lecture. The 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 experiment before you come to the lab. You will also probably 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.

Laboratory Policies:

- Positively NO drinking or eating of any kind of foods is allowed for ANYBODY in the laboratory.**
- If you feel that an experiment has been graded unfairly, you may 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 can make mistakes, and we may agree that your score was too low, or we may find that we missed a mistake that you made and gave you a score that was too high.
- COMPUTER POLICY :** The PASCO software that we use in this laboratory can be very sensitive to the way in which WINDOWS is set up. Because of this please **DO NOT** make any changes to any of the WINDOW SETTINGS, no matter how inconsequential that change may appear to be. Please use the WINDOW 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.
- LAB STATION POLICY :** You and your lab group are responsible in the begin of the lab to turn on first the interface and then the computer. At the end of each lab, you are responsible to leave the equipment at your work station in the same condition in which you found them. This means you will leave all instruments and the computer in their 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.**
- All laboratory experiments as scheduled for a given section are MANDATORY AND CANNOT BE MISSED NOR RESCHEDULED.

6. You must attend the section for which you have originally registered. You cannot attend other sections for reasons of personal convenience, as the other sections may be operating at maximum student capacity.
7. Makeup: Please DO NOT miss any of your labs. In case of medical emergency and with the proper paperwork to prove your case, the lab work could be waived. Once in the semester you can attend another lab section within the same week to make up the lab, where all your lab work and lab report will be graded as you attend your lab. Pre-lab still due before the lab start.
8. Late Arrival: It is imperative that you arrive on time for the labs. The pre-lab quiz will be given at the beginning of the lab and a late arrival will result in a zero for that quiz. It is clear that the lab involves a group effort. You will be part of a group working at one of the lab stations, and it is unfair to your group if you are so late that their progress in performing the exercise is delayed because they need to explain to you what is going on. Your instructor therefore has the authority to subtract points if you arrive after your group has begun working on the exercise for that day. In any case, arriving 15 minutes or more late counts as an unexcused absence and you will lose the lab report for that day.
9. Receiving an Automatic Zero for the Lab: If you consistently violate safety precautions in the lab to the point where, in the instructor's judgment, you represent a safety hazard to both yourself and your fellow students. You will be asked to leave the lab and will be given a total lab score of zero. You will receive one warning from the instructor that your behavior is a safety concern. If after this warning you continue to violate safety instructions you will then be asked to leave and not return.
10. The Academic Integrity Policy is cited in <http://academics.utep.edu/Default.aspx?tabid=23785>
11. Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.
12. Military Statement : If you are a military student with the potential of being called to the military service and/or training during the course of the semester you are encouraged to contact the Laboratory Coordinator as soon as you are being called.
13. In all other matters not discussed above, the University of Texas at El Paso's university wide policy supersedes all other laboratory's policy.