Syllabus for Introductory Physics Labs

Required Text:
For 1441 or 1443 – Physics Lab Manual – Mechanics and Sound
For 1442 or 1444 – Physics Lab Manual – Electricity and Light

Physics Lab Web Site: www.uta.edu/physics/labs

Lab Coordinator: Suman Satyal suman.satyal@uta.edu

Teaching Assistant: Information for each lab can be found at the above web site.

Lab Supplements: Available at the above website for some of the lab exercises.

Lab Exemptions:
• A student can file for a lab exemption if he/she has taken, completed, and passed the lab at UTA within the past three years, or has taken the lab as a separate graded course at another university (copy of transcript showing lab grade is required). The current course instructor decides upon acceptance of the lab exemption.
• Lab exemptions must be on file by the census date. Failure to have a lab exemption on record for the current semester and not attending any labs can result in a grade of zero for the lab.
• Meet with the physics staff (SH 108) to get the lab exemption form.

Students with Disabilities:
Students who need an accommodation based on disability should arrange to meet with the lab coordinator to determine what arrangements are necessary to accommodate your needs.

Lab Attendance:
• You are to attend your scheduled lab time and assigned room.
• If a lab is missed see Missed Lab section below for your options.
• Absences due to chronic or emergency medical problems will be handled on an individual basis.
• If you are aware that you will be absent from a lab due to a University excused absence, you must notify your lab instructor or the lab coordinator a week ahead of time, and arrange to complete the lab in some other section during the week in which the lab is assigned. Notifying after the event voids the excused absence as outlined in the rules and regulations for excused absences in the Undergraduate Catalog.

Tardiness:
Tardiness is discouraged and will be handled in the following manner:
• Within 15 minutes of the start of the lab, allowed to join your lab group.
• Between 15 minutes and 30 minutes, allowed to join, but with a 10 points penalty.
• Over 30 minutes late, you will not be allowed to perform the lab.
• Chronic tardiness will be addressed by the lab supervisor and brought to the attention of your course instructor.
Missed Labs:
We realize that circumstances, other than those discussed in Lab Attendance, may arise that prevents you from attending a scheduled lab. However, with enrollment up, lab space is very limited, and finding a lab that has space and meets your schedule may not be possible. **Note:** A scheduled routine doctors or dentist appointment does not qualify under the lab attendance policy for emergency medical treatment and will be treated as a missed lab.

Other than the choice below, with space permitting, there are NO other options to make up the lab.

- Contact your TA as soon as possible, follow his instruction on filling up “Request to attend alternate lab” form, and try to arrange to attend another lab as per his/her instruction.

Since it might not be possible to do a makeup lab every time, your lowest ‘regular’ lab grade will be dropped. However, all signature assignments count towards your grade. (see the Grade Reported to Course Instructor section, below, for more details).

We will make reasonable efforts to accommodate students who miss labs due to illness or other category of excused absence, however, an excused absence does not exempt the student from completing the required work. Please note that if 2 or more labs are missed, it may be necessary for students to arrange for a grade of incomplete for that semester and to make up the missed labs in the next semester.

Lab Report Requirements:
- Complete the pre-lab questions found at the beginning of each lab unit in you lab manual. **All pre-labs are due at the beginning of the lab.** These are a required part of the lab report. The questions for the assigned lab unit are to be completed prior to the start of the lab and turned in at the beginning of each lab period.
- **You are required to bring the lab manual to each lab.** Hand reproductions will not be accepted or may be accepted with a penalty. Photocopies of lab pages will only be accepted if you have forgotten your lab manual and it is known that you already own a lab manual. The Physics department will not photocopy the lab pages.
- All lab reports are to be **completed in pencil.** Pages completed in pen and with numerous marked out areas are subject to a penalty. All lab reports, unless otherwise notified during the lab, will be due at the end of the lab period.
- **Data gathering for the lab is a group effort. Calculations, answers to questions, and Signature assignment reports should be an individual work.** We encourage individual work on all parts of the lab for the calculations and answers; it is in this area that the majority of the questions for the lab exam will be taken from.

Lab Exam:
- The lab exam consists of 18 multiple choice questions and 4 problems, covering all assigned lab.
- Sample questions and problems can be found at [www.uta.edu/physics/labs](http://www.uta.edu/physics/labs)
- It will be held at the same time and location as your normally schedule lab.
- An equation sheet will be provided. You are permitted one clean sheet of paper.
- The same procedure will be allowed for a missed lab exam as that outlined in the Missed Labs section.
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- Once the assigned week for the lab exam is completed, a makeup exam will only be allowed under conditions of documented medical emergency, hospital stay, or major accident.
  Petition for a makeup must be made within a week of your normally schedule lab time.

Grade Policy:
Your lab consists of 9 experiments out of which seven of them will be called “Regular” labs, and the other two will be called “Signature assignments” (SA-I and SA-II).
Lab report Grade for “Regular” lab consists of

  5%  Pre-lab questions
  40%  Active participation in the lab exercise.

Deductions will be made for:
  • Not having your own calculator and relying on someone else to do calculations
  • Not having the lab manual
  • Answering or making a phone call
  • Tardiness
  • Performing some other task not related to the lab exercise. (e.g., surfing the web, course work, needlepoint, etc.)

55%  Content of lab report
  • Shown Calculations
  • Analysis
  • Graphs
  • Problems and Questions
  • Data

For 1441/1443, Signature assignments (Unit 4 and Unit 7) do not follow the above ‘regular’ lab grading outline. Similarly, for 1442/1444, Signature assignments (Unit 18 and Unit 21) do not follow the above ‘regular’ lab grading outline. Refer to the respective units in your lab manual to know the detailed grading rubric for those units. Your TA will also discuss about this in detail during first week of lab. Reports submitted for signature assignments MUST be individual work.

Grade Reported to Course Instructor:

**Overall Lab grading mechanism:**
There are 9 labs and a lab exam, out of which the 9 labs is split into 7 regular lab and 2 signature assignment labs.

The grading procedure is as follows:
  • We will have 7 regular labs, each worth 8 points = 7 x 8 = 56, (Out of which we pick top 6) = 48. We drop one of the regular labs with the lowest grade.
  • The first Signature assignment is worth 14 points.
  • The second Signature assignment is worth 20 points.
  • The lab final exam is worth 18 points.

Total = 48 + 14 + 20 + 18 = 100