
Physics 232 Syllabus

Co-requisite lab for PHYS 231- Intro Physics and Biophysics 1

Instructor: Khomidkhodzha Kholikov

Teaching Assistant: ???

Teacher-on-record: Dr. Jason Boyles

Class: Physics 232, Intro Physics and Biophysics I lab, T WH 1:00-3:00, OCH 1007

email: khomidkhodzha.kholikov662@topper.wku.edu

Course Outline: The Physics lab course will consist of a number of experiments and meets once a week for 2 hours. Read the syllabus (see below) before the first class. Lab will meet the first week of classes. During the first meeting, the Concept Test will be given and the exercise described in the next chapter “Igor-Pro and Equation-Writer” will be covered.

Learning Outcomes: After successful completing this course, students will be able to analyze data and evaluate accuracy and precision, and will have an understanding of basic concepts in mechanics, laboratory techniques and equipment.

1. Topnet lists a “Teacher-on-record”, however, teaching will be done by a Graduate Assistant (this is the instructor).
 2. Questions/Complaints/Problems: Talk to the instructor first, but if no resolution can be reached contact Dr. Dobrokhotoy, the Laboratory Director. Do not contact the Teacher-on-record as listed on Topnet.
 3. Lab manuals will be handed out during the first meeting. The student agreement sheet must be turned signed and turned in by the second lab meeting.
 4. Grading
Grades are determined by: $\text{Grade} = 0.1 \times \text{Quiz-average} + 0.05 \times \text{Concept Test} + 0.2 \times \text{Final} + 0.55 \times \text{Report-average} + 0.1 \times \text{Project}$.
 5. Quizzes
A short quiz will be given during the first few minutes of each class over the experiment to be performed that week. The purpose of these quizzes is that you come to class prepared. Experience has shown that students who do not prepare have difficulties finishing on time, whereas students who are well prepared are able to finish easily within the 2-hour class period.
 6. Concept Test
A Concept Test will be given the first and last weeks of lab classes. This test is a multiple-choice-test on objectives & ideas you will learn in the lab class. You will not receive a copy of this test. You are not allowed to make notes during the test, but you are allowed to make notes about it during the first class after you hand it in. As a matter of fact, you **SHOULD** make notes about it then, so that you can study the concepts you did not understand. Your first score of the Concept Test will not count, but the instructor will keep it on record to mark your progress by comparing Concept Test #1 with Concept Test #2.
 7. Final
Final = Exam given during the last class involving taking and analyzing data. The laboratory final is given the week prior to class finals during the regularly scheduled lab meeting time.
 8. Report = Long Report or Short Report
 - a) **Long Report** consists of Abstract (10% of your grade on the report), Introduction (15%), Materials/Methods (15%), Results (45%) and Discussion+Questions (15%).
 - b) **Short Report** consists of Abstract (20%), Results (50%), Discussion+Questions (30%).
 9. In general, every other week you will hand in a Long report or Short report. The instructor will tell you whether a Short or a Long report is due. Examples of each are given elsewhere in the manual. The grading rubric lists individual sections and the points for each item required for the report. If a section is not required for a specific report, the points are dismissed.
-

10. Lab Reports are due in electronic form 48 hours before the next experiment, and must be 1) sent by e-mail to your instructor or 2) hand in a hard copy. **The instructor shall return your report with feedback and grade before the next class.** There will be a late penalty of $3 \times N$ points if the report is N hours late, if $N < 33$, but if $N \geq 33$ your grade on that report will be zero. Late penalties may be waived in exceptional circumstances, but the only person who can waive the penalty is Dr. Dobrokhotoy.
11. **No make-up labs are permitted.** The lowest lab score will be dropped at the end of the semester.
12. Projects
Project = extra work on an existing experiment. This extra work must be done when the experiment is scheduled. It will be necessary to plan ahead and be extremely well prepared for this experiment. Ideally, your extra work will lead to an improvement in the experiment in the future. You must discuss your plans for this project with your teacher or lab director not later than the 2nd week of the semester. Your teacher or lab director will also have suggestions for projects if you are not sure what to do. After completing the project you write a Long report about it. This report is due when the report for that experiment is due and must have an addendum describing your results and ideas for improving the experiment.
13. Pass/Fail Tests
Pass/Fail tests: There will be 4 or 5 pass/fail tests. You can do these pass/fail tests as often as necessary. The teacher or the TA will proctor these tests. You must pass all these tests. Whenever you are done early you should ask the teacher or the TA permission to take one of these tests. Your teacher will give you more details. One of them is plotting and fitting data to a straight line using Igor-Pro. Almost every experiment requires you to do such a fit.
14. In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in DUC A-200 of the Student Success Center in Downing University Center. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from this office.
15. Title IX: Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (0.2070) at <https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf> and Discrimination and Harassment Policy (0.2040) at https://wku.edu/policies/hr/_policies/2040_discrimination_harassment_policy.pdf. Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.
