

Syllabus, Information, and Schedule

Physics and Human Affairs Lab Information

Instructor: _____

Office: Physics Building (PHYS) _____

Phone: 575-_____

E-Mail: _____@uark.edu

Office Hours: _____

Lab Web Page: <http://physics.uark.edu/phalab/> _____

Purpose: To learn about physical concepts in a “hands-on” setting.

Connection between this lab class and the lecture course also called “Physics and Human Affairs:” There is a loose connection between the lab and the lecture. Students should realize, however, that this lab class is a separate class, not part of the lecture, and not bound by the material covered in the lecture. Often the labs will not correspond to the lecture material at all.

You will be given an opportunity to ask questions about the assigned homework from the lecture class; however we must place time constraints in order to allow time for the completion of the lab.

How the lab is taught: The idea behind this lab is to let you, the students, explore the laws of nature. We do not expect the instructor to “walk you through” the lab as you do it, or to give a “mini-lecture” before each lab. You are expected to do the labs alone or in small groups, asking the instructor when you need help understanding something (a procedure or a concept). In order for you to do this, **you must bring your lab manual to every meeting of the class.** It would be a good idea for you to read the manual before coming to class, so that you will be ready to start when class begins. Do not expect the instructor to just give you the answer. He/she is there to give guidance and act more as a support than as a traditional teacher.

Grading: There will be a total of eleven lab sessions this semester. There will be a quiz at the end of each session based on the concepts of the lab(s) just completed. At the end of the semester there will be an exit exam covering the major points of the labs. This means that there will be

a total of twelve weekly scores for you in the gradebook. Please see the attached schedule for the number of points each lab and quiz are worth, and the overall grading scale.

The lab book will be graded after you have completed each lab or when time is up. Your lab instructor must sign your lab manual at the end of the lab.

At the end of the semester the lowest weekly score will be dropped. For some people that lowest score will be a zero for a missed lab. For people who come to all of the labs, the final can be skipped, and the lowest dropped score will be the zero for the missed lab final.

Lab Quizzes: The purpose of the lab quiz is to see how much you have learned from the lab. Often when people work in groups it is easy for the lab to get done and for nobody to really know what happened or why. The quiz works in two ways. First, it provides an incentive to the students to really pay attention during the lab and to really try to understand things. Secondly, it allows the instructor to determine which students did not learn the concepts, and grade them accordingly.

Quizzes will be mainly conceptual in nature, but you may expect some amount of mathematical problems (similar to the sorts of math that was done during the lab).

Missing Lab:

No Make Up Labs: There will be no make up labs. The lowest lab grade will be dropped so you may miss one lab. This applies to people who miss a lab for an “official” reason, as well as to people who miss a lab “just because.” You will be given a zero on both the lab and the quiz, and at the end of the semester that score will be dropped.

If you are a member of a sports team or another officially sponsored group and you need to miss a lab class, it is your responsibility to speak to your instructor at least a week before the section that you will miss. Your instructor will advise you to attend a different lab section, so you will still be able to do the lab. There are no make-up labs, so the only way to get credit for a lab is to do it the week it is offered. If you miss a lab and are not able to make it up, it may count as your dropped lab.

If you have a death in the family and you need to miss class, you must contact the dean of your college or school. They will then notify all your instructors, and you will be officially excused from the lab that you have missed. Without this official notification, we will not excuse you. If you do miss a lab for this reason, it will count as your dropped lab.

If you get sick and miss a lab, it is best to contact your instructor right away. It is possible that you will be able to attend another lab section (later in the week) to keep from missing the lab entirely. Be aware that you may have to furnish a doctors excuse for your absence, and that we retain the right to call your doctor to check and make sure the excuse is valid. If you miss a lab because you are sick, it will count as your dropped lab.

Be on time. This is a group-oriented class and participation requires your attendance. The door will be closed 15 minuets after class has started, if you arrive after the door is closed, then you will receive a zero. If you know that you are going to be late, notify your lab instructor prior to lab starting.

Inclement Weather Policy: Lab will be held unless the University Officially closes. You can call 575-7000 to determine the open or closed status of the University in the event of bad weather. If the university is open but you are afraid to drive on icy/snowy roads, please contact your lab instructor. You can probably go to another lab section, later in the week, to do the lab.

Cell phone and pager: All cell phones or pagers must be turned off. You will not be allowed to leave the lab room to take personal phone calls or to return pages.

ATHLETIC EVENTS, BAND MEMBERS, ETC: You are required to inform your lab instructor of your status as an athlete or band member. Also you must turn in a written release form to your lab instructor enabling him/her to disclose your grades to your coaches or advisors. Please see your instructor outside of class for this. You are also required to notify your lab instructor of any athletic event that will keep you from attending class prior to the event. This means that your coach or the athletic department must provide you with a written note with both the date and time of the event. If you miss class without notification you will receive a zero.

There is no extra credit. Do the work and you should do fine.

If you have any question or concerns about this class feel free to contact me. If you cannot meet with me during my offices hours I can try to arrange a convenient appointment time with you.

Grading:

Points Available

There are 12 weekly scores, only the top 11 are kept.

Weeks 1 - 14: (11 labs, 2 holidays)

Lab score = 20 points, Quiz score = 10 points. Weekly total possible = 30 points

Week 15:

Final Exam = 30 points. Weekly total possible = 30 points

Total Points Possible:

Keeping only the top 11 scores, the maximum number of points possible at the end of the semester is $11 \times 30 = 330$ points.

Remember, only one weekly score will be dropped. That could be a missed lab, or a zero on the lab final (if you don't take the final). If you miss a lab, you will need to take the lab final. If you miss a lab and also don't take the lab final then you will have missed two weekly scores - and your maximum possible grade would be a B.

Grading Scale

Grades will be assigned based on *points*, not percent.

Grade	Point Range
A	301 - 330 pts
B	271 - 300 pts
C	241 - 270 pts
D	211 - 240 pts
F	210 and below

Schedule of Labs:

Week 1	Aug. 24 – 28	No lab the first week - no labs all week
Week 2	Aug. 31 – Sept. 4	Lab 1: Physical Science Basics (20 points) Quiz 1 (10 points)
Week 3	Sept. 7 – 11	Labor Day Holiday on Monday - no labs all week
Week 4	Sept. 14 – 18	Lab 2: The Law of Inertia (20 points) Quiz 2 (10 points)
Week 5	Sept. 21 – 25	Lab 3: Acceleration & The Force of Gravity (20 points) Quiz 3 (10 points)
Week 6	Sept. 28 – Oct. 2	Lab 4: Newton's Law of Force Pairs & The Force of Friction (20 points) Quiz 4 (10 points)
Week 7	Oct. 5 – Oct. 9	Lab 5: Energy (20 points) Quiz 5 (10 points)
Week 8	Oct. 12 – 16	Lab 6: Heat: The Transfer of Thermal Energy (20 points) Quiz 6 (10 points)
Week 9	Oct. 19 – 23	Lab 7: The Electric Force (20 points) Quiz 7 (10 points)
Week 10	Oct. 26 – 30	Lab 8: Magnets & Electromagnetic Induction (20 points) Quiz 8 (10 points)
Week 11	Nov. 2 – 6	Lab 9: How to Build a Speaker & Motor (20 points) Quiz 9 (10 points)
Week 12	Nov. 9 – 13	Lab 10: Light and Atomic Spectra (20 points) Quiz 10 (10 points)
Week 13	Nov. 16 – 20	Lab 11: Nuclear Processes & Exponential Decay (20 points) Quiz 11 (30 points)
Week 14	Nov. 23 – 27	Fall Break and Thanksgiving - no labs all week
Week 15	Nov. 30 – Dec. 4	Final Exam (30 points)