Laboratory Physics Policies and Expectations • PHY • AP1 • AP2

MAXIMIZING THE OPPORTUNITIES TO LEARN PHYSICS WELL IN THE FEW DAYS WE HAVE TO DO SO [2017/18]

A. CLASSROOM LEARNING ENVIRONMENT

We will have about 180 hours to learn physics in the classroom. Human minds required thousands of years to assemble our present understanding of physics, so we try to make the most of our short time together. Gathering and maintaining focus while eliminating distractions will increase your chances of learning the material.

1. Do not bring inappropriate things to class. Phones, ear buds, food, drinks, candy, etc., electronic or spinner toys are some things that are inappropriate. Water in a **transparent** container at your desk when no lab is in progress is acceptable. The "no phones/ear buds" is difficult for some students to absorb, so I'll repeat it here and elsewhere. If you are so fortunate as to own a phone, keep it powered off and stored securely out of sight during class. Ear buds, too. This includes every moment you are in the classroom—even during passing periods, including busy times and quiet times. Most students can successfully process this policy. Some require administrative punishment to comprehend it, and they will be accommodated with Saturday Schools.

2. Bring the right things to class. Your physics binder, pencils, scientific calculator, ruler/protractor combination are welcome every day. Leave your textbook at home unless otherwise instructed.

3. Be in your seat when the tardy bell rings. Once a seating chart is established, attendance is taken quickly so that we can move into the day's lesson. If you arrive late—for any reason—be sure to sign in on the tardy sign-in sheet. Undocumented tardies cannot be cleared later.

4. Respect the educational rights of those around you. Everyone needs to be able to see, hear, and participate in the lesson without distraction.

5. Respect the property rights of those around you. Don't mess with other people's stuff, especially the physics instructor's stuff; apparatus set out within students' reach is often delicate, expensive, and precisely arranged for a classroom demonstration.

6. Follow all lab instructions with extreme care. Always read the instructions carefully and follow them closely.

7. All school rules apply at all times. Read your copy of the school rules (Students Handbook) so that you're familiar with them.

B. GRADING ISSUES AND SPECIAL OFFERS

1. Academic Grade. Grades are based on the percentage of points earned out of the total possible. The grading scale is as follows.

100% - 90% = A · 89% - 80% = B · 79% - 70% = C
69% - 60% = D · 59% - 0% = F
(Note: +/– are not given since they do not affect GPA)

The areas in which academic credit is given include unit tests, labs, and the semester final exam. Sometimes a student's grade in physics carries meaning to an outside agency (college, etc.). The existence and/or details of this concern do not factor into the grade calculation.

2. Citizenship. Your citizenship grade is determined by your conduct, attitude, punctuality, and attendance demonstrated in class (see the student handbook).

3. Cheating. Cheating on any assignment, activity, homework, quiz, lab, test, or exam is a serious violation of classroom and school policy. Classroom consequences include the total loss of academic credit for that assignment, and an immediate reduction in the citizenship grade to an F. Please refer to the Academic Integrity Policy in your Student Handbook for the definitions and school consequences of cheating.

4. Posting. Detailed grade reports are posted all year to **www.phyz.org** after the first interim. Grades are listed by student ID numbers and organized by period. Letter grades are posted to the Student Information System (SIS) (e.g., "Q") at all marking interims (approximately every four weeks). **Grades in progress are not posted to Q between interims.** They're at phyz.org.

5. Turnover Period. Grades are cumulative throughout the semester. First and second semester grades are independent of each other.

6. Special Offers

Opportunities for credit beyond the usual sources of labs and tests vary among PHY, AP1 and AP2. These opportunities may include Test Correction Journals (TCJ), Test Correction Mastermind (TCM), and Credit Toward Final (CTF). Details will be discussed in class.

C. OTHER INFORMATION

1. Homework

Physics students cannot learn physics unless they fully engage with homework the day it is assigned. After the homework has been assigned, there will be a chance to ask questions about it.

PHY (Physics only) Daily assignments will be collected. On the day before the unit test, homework will be returned.

2. Lab Work

We have access to a substantial array of demonstration and laboratory apparatus. This good fortune is primarily the result of two conditions. First, that we were able to secure the substantial capital outlay (money) with which to buy it. Second, that students from previous classes cared for it while using it. That is, they didn't break it.

During laboratory periods, you are expected to work safely and productively on the task at hand in accordance with the instructions provided. You will be prohibited from performing labs if you endanger people or damage apparatus during laboratory activities. You will be working in a lab group. Be aware that your group is responsible for equipment assigned to it. If there is something missing or wrong with your apparatus, report it immediately so that your group is not held accountable for a problem created by others. Students may be held responsible for repairing or replacing equipment that was damaged while they were using it. All members of the group must work together cooperatively and share responsibility for their work. If you feel a member of your group is not

participating appropriately and cannot work it out within the group, contact the instructor for guidance. Lab groups change several times each semester. Your lab grade may be the score of one lab chosen (at random) from your group, or by your score on a lab quiz you will take at the conclusion of the lab. You will be allowed to use your own lab document during the lab quiz. You must be present in class during a lab to earn credit for it.

3. Classroom Computers
We are fortunate to have a set of laptop computers and a variety of sensors that can be interfaced with the computers. The last page of this document is a sheet describing computer use policies. As long as you adhere to the policies, you will maintain computer use privileges. Misuse of a school computer will result in classroom and school consequences.

4. Test Aids
PHY (Physics): Students are given their homework packs back on the day before the test. They may add notes written on the returned pages for use during the test.

AP1 and AP2: Bring a blank 3" x 5" card to class on the day before the unit test. Have your **blank** 3" x 5" card stamped by the teacher. In addition to the AP Equation Sheet, you will be able to access information you write on this card. If you know you will be absent, you may have a friend get a card stamped for you. Your notecard must be your original, handwritten work. Information may not be attached, photocopied, or printed by an electronic or mechanical device onto the notecard. The completed notesheet must include your name, period, and unit name. The card must be turned in when the test is turned in. Failure to observe these restrictions will result in the loss of notecard privileges. Notecards may not be used for make-up tests unless the absence was due to an official school activity. The AP Equation Sheet can be used on make up tests.

5. Calculators
The only kind of calculator needed for Physics and AP Physics is a **scientific** calculator, such as those in the TI-30 series. Scientific calculators may be used during tests. **Graphing** calculators, such as those in the TI-80 series and beyond, are **not** allowed during physics tests, though they can be used on the AP Physics Exam in May.

6. Passes
a. HALL PASS. During direct instruction and test periods, the hall pass is to be used only in emergency situations. Only one student may be out of the classroom at a time. Always make sure you have permission to use the pass; usage will have a negative impact on CTF ("extra credit").

b. TARDY PASSES. If you are entering class with a tardy pass, give it to the teacher **after signing in.** Tardy passes will not be given to students working after class unless otherwise announced in advance.

7. Letters of Recommendation
I am happy to write thorough, meaningful letters of recommendation for students I have known through one full academic year or more and who have impressed me with their attitude and aptitude in physics. If you would like me to write a letter of recommendation for you, please let me know and complete the Recommendation request at phyz.org I will complete as many as three recommendations for you. (Common App counts as one.)

8. Progress Grades (not on Q) and Marks (on Q)
Detailed grades are posted to my website at www.phyz.org. I use the robust spreadsheet tools available in Microsoft Excel rather than Q's online Gradebook. **Any search for Q Gradebook progress information in Physics or AP Physics will return an error message.** Instead, go to phyz.org where you'll find links to grade reports, test reports, and lab scores. Interim grades ("marks") **are** reported to the school's registrar via Q per the district schedule (every four weeks).

9. Policy Changes
Changes in these policies will be announced in class, and/or posted in class, and/or given to students in written form.

D. TARDY/MAKE-UP PROCEDURES

1. Tardiness
If you are tardy for any reason, you must sign in on the tardy sign-in sheet near the door. Any variation from this procedure may result in a "cut" placed on your attendance record. **Absences on the attendance records of students who were tardy but did not sign the tardy sign-in sheet cannot be cleared by the instructor.** Excessive tardiness will result in a lowered citizenship grade and administrative referral.

2. Make-Up Work
Your unit schedule is your friend when you are absent. Know what topics and activities you're missing. Have a "study-buddy" to keep you informed of what you missed. You can get most handouts at www.phyz.org. He/she can also get a notesheet stamped for you.

a. UNIT TESTS. The make-up test must be completed before the subsequent Test Correction Journal activity. See the unit schedule so you know when that is. Make-up tests are **never** given before the in-class test. Make-up tests must be completed after school (i.e., after sixth period). If the make-up test is not completed before the next TCJ, the test score will be recorded as a zero. At the end of the semester, a make-up make-up can be taken to replace that zero. No more than one make-up make-up can be taken per semester. So if a student misses two unit tests and their make-ups, one of the missed tests will be permanently recorded as a zero.

b. TEST CORRECTION JOURNAL work must be made up at lunch or after school by appointment. Journaling for a given unit test must be done before the TCJ Quiz for that unit test is administered. Missed TCJ quizzes must be completed before the next TCJ occurs. See unit schedules for specific dates. Failure to make up this work in the given time renders the credit forfeit. **Neglected TCJs cannot be made up at the end of the semester.**

c. DEMONSTRATIONS AND VIDEO PRESENTATIONS. Demonstrations cannot be made up. You should get related question sheets and you are expected to get information from a classmate. Videos can be made up by appointment. Test questions may relate directly to a demonstration or a video. You are not exempt from such questions due to an absence.

d. LABS. Your overall lab score for the first semester of Physics will consist of scores from approximately 12 lab activities. During the semester, we will complete activities totaling 16 lab scores. If you complete all lab activities offered in class, your four lowest scores will be dropped. If

you complete 15 lab activities, your three lowest scores will be dropped. If you do not complete at least 12 lab activities by the end of the semester, you will have to submit demonstration and video presentation worksheets to fulfill your lab score obligation. The second semester of Physics and both semesters in AP Physics follow the same approach. In essence, the best three of every four lab scores count. If you miss a lab activity, you will need to obtain the handout and consult your lab group partners to find out what was covered. Lab material is often included in test and exam questions.

e. FINAL EXAM. If you cannot take the final exam at the scheduled time, let me know. Most often, the exam will need to be made up sometime following the in-class administration.

f. EXTENDED ABSENCES, SUSPENSION, and other unusual circumstances must be discussed with the teacher on an individual basis outside of class time. Notification should be made before the absence. You are expected to keep up as much as possible via the schedule, handouts, presentations, and answer keys posted at www.phyz.org. Kindly consider this notice as preemptive fulfillment of "homework requests" managed by the attendance office. In other words, all homework requests are fulfilled via the information posted at phyz.org rather and via paper.

LIKE SO MANY THINGS, LEARNING PHYSICS IS A CHOICE · HOW DOES IT COMPARE TO OTHER CHOICES?

Choosing to learn physics	Choosing to build muscle	Choosing to eat well
1. Come to the course: enroll in physics, for example.	1. Come to the weights: enter a weight room, for example.	1. Come to the food: go to a good restaurant, for example.
2. Pay attention to lessons in class. They will alert you to the wonder, nature, and concepts to be learned.	2. Pay attention to the weight mechanisms: the bars, the weights, etc.	2. Pay attention to the menu and preparation of the food. The sights and smells of the food will awaken your senses.
3. This part is of critical importance to the goal here: complete daily assignments (do the homework). This is the point at which you truly take ownership of the physics. Sure, you've put yourself in the class and the day's lesson seemed to make sense. But none of that really counts if you don't answer questions about the material. In fact, all the other steps seem silly if you choose not to do the homework assigned that day. Doing it tomorrow is less valuable as the memory will degrade. It was assigned when it was intended to be completed. Additionally, a new lesson will be taught tomorrow. The logistics break down quite quickly.	3. This part is of critical importance to the goal here: elevate the load (lift the weight). This is the point at which your body is impacted by the effort. Sure, you've put yourself in the weight room and loaded the bar correctly. But none of that really counts if you don't lift the weight. In fact, all the other steps seem silly if you choose not to lift the weight. Lifting it tomorrow is less valuable as your body has missed an opportunity. To maintain the muscle-building plan, twice as much weightlifting will need to be done tomorrow. The logistics break down quite quickly.	3. This part is of critical importance to the goal here: consume the food (eat the meal). This is the point at which you truly take ownership of the food. Sure, you've put yourself in the restaurant and made sense of the menu. But none of that really counts if you don't eat the food that you ordered. In fact, all the other steps seem silly if you choose not to eat the food once it's served. Eating it tomorrow is less valuable as the food will degrade. It was served when it was intended to be consumed. Additionally, a new meal will be served tomorrow. The logistics break down quite quickly.
4. There are other aspects in choosing to learn physics, but none are so central to the process as completing daily assignments.	4. There are other aspects in choosing to build muscle, but none are so central to the process as lifting the weights.	4. There are other aspects in choosing to eat well, but none are so central to the process as consuming the actual food.

Choosing to learn physics requires certain things of students. The requirements are not excessive, but they do require daily effort. Students who succeed at learning physics

1. choose to come to class prepared to learn and focus on the lesson of the day. This may require engaging in a guided inquiry, demonstration, or laboratory activity. They manage to endure to period without checking the Twitter feed, status updates, or text chatter. Dozens of students here at Rio can do this day after day.

2. choose to complete day's assignments. This sometimes requires reading a page or two of text, then answering a few questions and solving a few problems. From time to time, it may require watching a video on the Internet and answering questions about it.

Students can easily cheat on homework completion. Mindlessly copying/recording answers to physics questions does nothing to help one learn physics. Learning occurs between the question and the answer. **Confusion is the sweat of learning.**

3. choose not to be helpless when they get stuck on the homework. Everyone gets stuck on homework from time to time. It's the reaction to getting stuck that distinguishes students. Mr. Baird has a special set of instructions to avoid getting stuck on homework. Learning occurs in the process between the question and the answer. **Confusion is the sweat of learning.**

4. choose to prepare for unit tests. This involves reviewing the course material and preparing a notesheet/card. No other physics homework will be assigned that day, so time will be available for this preparation.

5. choose to follow up on tests through the Test Correction Journal/Mastermind activities. These in-class activities afford students with the chance to improve unit test scores.

Responsible Computer Use Agreement for Physics Students

REQUIRED FOR ACCESS TO THE LAPTOP COMPUTERS IN THE PHYSICS CLASSROOMS

The computers available for student use in this class are very special. Their use is to be considered a privilege. I am asking to be given access to these computers. When I use the computers in this class, **I will**

1. handle the computers with utmost care. I will take them out of the storage cart and return them to the storage cart in accordance with the teacher's instructions. I will disconnect the power cord when I take the computer and connect the power cord when I return the computer to the cart. I will position the computer at my desk so that it is secure at all times. I will be mindful of the placement of all cables and connecting wires so that neither I nor my classmates are likely to trip over them. The computer will not be dropped or allowed to fall while it is in my care.

2. use the computers carefully. I understand that the computer is a sophisticated yet delicate tool. Its screen is to be viewed, not to be touched. Its keyboard is to be typed on gently. Care is also to be taken when clicking the trackpad (mouse) button. I will not touch the keyboard or trackpad with anything but the tips of my fingers. I will not allow the computer to be marked upon with any kind of writing, scratching, or cutting instrument. Nor will I expose the computer to magnets or magnetic fields. I assume responsibility for the physical well-being of the computer while it is in my care.

I will not

1. open, insert, or attach anything in/to the computer (such as an external/thumb drive) without the permission or instruction of the teacher.

2. connect anything to the computer (via its various ports) unless instructed to do so by the teacher.

3. use any software applications when not authorized to do so (for example, using a browser when instructed to use simulation, data acquisition, or analysis software).

4. use any software applications in a manner inconsistent with the stated goals of the activity.

5. save any files to the computer's hard drive or any other medium without the permission of the teacher.

6. print without the permission of the teacher.

7. navigate the Internet in a manner inconsistent with the teacher's instructions and/or District Policy. "Surfing" to unauthorized websites is a violation of this policy.

8. make any modifications to the software on the computer. This includes—but is not limited to—moving files, deleting files, renaming files, and altering the settings of system software.

9. mark, deface, or otherwise mistreat any part of the computer. I won't touch or otherwise leave marks on the screen.

I understand that failure to comply with this agreement (and school and district computer use policies) will result in termination of my computer privileges and that other classroom and school consequences may be imposed.

>>> Experimental Online Course Participation for 2017-18 <<<

Remind messaging list

Please enroll in Mr. Dean Baird's Remind messaging list for your course/section. Go to remind.com/join and enter the code for your class. Or enter the code into the Remind app. Or text the code to 81010.
PHY – 1st Period Physics – Remind course code: **phyz-phy-1**
PHY – 2nd Period Physics – Remind course code: **phyz-phy-2**
AP1 – 3rd Period AP Physics 1 – Remind course code: **phyz-ap1-3**
AP2 – 5th Period AP Physics 2 – Remind course code: **phyz-ap2-5**
CP – 6th Period Conceptual Physics – Remind course code: **phyz-cp-6**

Google Classroom

Please enroll in Mr. Dean Baird's Google Classroom for your course/section. Go to classroom.google.com > sign into your **student** account > Add class > use the course code from below.
PHY – 1st Period Physics – Google Classroom course code: **pvmjxw**
PHY – 2nd Period Physics – Google Classroom course code: **62yka3**
AP1 – 3rd Period AP Physics 1 – Google Classroom course code: **s5viqy**
AP2 – 5th Period AP Physics 2 – Google Classroom course code: **con0h4**
CP – 6th Period Conceptual Physics – Google Classroom course code: **d4e9zw9**