

Physics 2006-2007

What You Need

1. A spiral bound college ruled notebook for taking notes in class and while reading the textbook. ([Bring to class daily](#))
2. A supply of 3-hole punched (not bound) college ruled paper for taking quizzes. ([Bring to class daily](#))
3. A graphing calculator with arithmetic, logarithmic, and trigonometric functions. A TI-83 or TI-83Plus or TI-84 is preferred. It is needed for HW, quizzes, exams, labs, and class discussions. ([Bring to class daily](#))
4. A 4” 3-ring binder (“D” ring preferred) to hold assignment schedules, homework, quizzes, handouts, lab write-ups, reference tables, formula sheets, etc. Keep this organized and neat. ([Bring to class daily](#))
5. A supply of #2 pencils. ([Bring at least two sharpened pencils to class daily](#))
6. Put your name on the notebook, calculator, and 3-ring binder.

Schedule

You should read each chapter before the first lectures covering that chapter. Reread it as the lectures continue. Learn everything in each assigned section of the chapter. Don't be too shy to reread it again and again.

Homework and laboratory due dates, and exam dates are listed in a schedule on the front board. ([Check it daily and update your schedule to match](#))

WebAssign problems will be available about one week before the due data and are due by the due date and time listed for each assignment.

Late HW, labs, and other assignments are acceptable only by prior arrangement with the instructor. Late assignments with permission may receive full credit. Late assignments without prior permission receive a zero. ([Late assignments without permission get no credit](#))
([Don't get behind on the reading, HW, or lab schedules. If you are having difficulty getting organized or getting your work completed on time talk to me.](#))

How the Grading System Works

There are four types of graded assignments affecting your quarterly grade. A brief description of each grade category and its weight follows:

Homework – 10%

Homework assignments may be either on paper or on WebAssign. Homework assignments are scheduled approximately one week before the due date. Only a few assignments during the year are on-paper assignments. Most of them must be submitted on-line through WebAssign.

Missed homework assignments count zero. At the end of each quarter, not before, one out of every five homework grades will be dropped. For example, if there are seventeen homework assignments in the first quarter, the three lowest will be dropped when the quarterly grade is computed. (Even if you cannot complete every problem on a homework assignment, it is essential that you do as many as you can and make at least one WebAssign submission before the deadline.)

Labs – 30%

Thursdays are usually reserved for laboratory workdays. You will be notified of any changes in the lab schedule. No homework assignments are due on lab days. Lab assignments from the previous week are usually due on the current lab day. If you need to miss a class for any reason, Lab Days are your worst possible choice. ([Homework and Lab due dates are posted on the front board about a week ahead of the due date](#))

Lab assignments include a paper handout that must be completed and turned in by 9:25 am on the due date. Many labs include a WebAssign component, which must be submitted through WebAssign. The WebAssign component of the lab write-up has its own due date and time that will appear on the assignment schedule.

Lab write-ups may not be turned in late without prior approval, and if they are late, you lose one point out of a possible ten points for each day late. Penalties may be avoided but only if illness is involved and the student discusses the problem with the teacher immediately upon returning to school.

Quizzes – 30%

These are given in class in the first 6-10 minutes. Those who skip class or arrive late will have to take the make-up the next morning before 9:25 AM or receive a zero on the quiz. Students who miss a whole day of school due to illness must make up the quiz in the morning before 9:25 am on the first day of their return. Those who are in school but miss Physics class for reasons other than illness must take a make-up quiz either that morning before 9:25 AM (before they leave) or the next morning before 9:25 AM. Missed quizzes may not be delayed past the day of your return without prior approval.

Each student is responsible for finding out if a quiz will be or has been given and showing up at the appropriate time to take the make-up quiz. Check with the instructor for definitive answers to these questions. Other students don't know for sure. If you miss the make-up opportunity, then a quiz grade of zero will be recorded in the grade book.

Do Not Skip class or miss class for any reason other than illness. Late make-up quizzes allowed for non-illness reasons on the same day the quiz is given in class, or the next morning, only.

Missed quizzes count zero. At the end of each quarter, not before, one out of every five Quiz grades will be dropped. For example, if there are seventeen quizzes in the first quarter, the three lowest will be dropped when the quarterly grade is computed.

Chapter Exams – 30%

You will be notified about one week before a Chapter Exam is scheduled. Each of these will cover the entire contents of one or two or three chapters. They are given only in class and only at the specified time. Do not miss the exam days.

Make up exams will be given when necessary about three days after the regular exam. These are scheduled for 8:20 am and will be collected at 9:10 am sharp. These will in general be harder than the original exam.

If you cannot make the original exam or the make-up exam sessions then you will receive a grade of zero unless you have contacted the instructor in advance and made another arrangement, if possible. Such arrangements are not always possible or acceptable to the instructor. Do not assume a third opportunity will automatically be available to you.

No grades are released until all exams are taken. Don't make everyone wait.

Semester Exams

There will be one Semester Exam at the end of each semester. Semester Exams cover all material presented in the course to date. These exams count for 20% of your SEMESTER grade. Take these exams very seriously.

Example: Suppose your quarter grades are 91 and 92. The exam could pull those A⁻ grades up to an A with a 99 on the exam. On the other hand, if your exam grade is a lowly 55, your semester average becomes an 84 and you'll get a B instead of an A. It happens every year.

Quarterly and Semester Grades

Quarterly grades are based

30% on quiz grades,
30% on laboratory grades,
10% on homework grades, and
30% on chapter exams.

Semester grades are based 80% on the two quarterly grades and 20% on the Semester Exam.

Other Rules

- You may not borrow any quiz, exam or laboratory assignment from another student; not even after the due date.
- If you turn in an assignment for another, you must hand both assignments to the instructor personally and provide an explanation.
- Arrive on time. Don't arrive late without a note from Mrs. Cosby.
- Do not interrupt the instructor or other students.
- Do not study other subjects during your Physics class.
- Do not do HW (not even physics HW) during your physics class without permission.
- Do not bring food or drink to class (water and some exceptions may apply to individual situations or students). No gum or candy.
- Do not deface books or surfaces in the classroom.
- Wait for permission to leave class.
- No cell phones, games, CD players, iPods, etc. allowed in class.
- Do not attempt to arrive or leave by the back door (except during some emergency evacuations). The back of the room is off-limits except with permission of the instructor (to use the computers, for example, and to work on the labs).
- Work every day. Stay current.
- Do not disrupt the class or the teaching process.
- Bring all required materials to each class each day.
- Keep track of your stuff and respect the stuff of others.
- Pay attention in class at all times. Always bring your calculator and be prepared to use it even before class starts.

General Organization of the Course

A typical weekly schedule includes lectures on Monday, Wednesday and Friday. Tuesday is for problem solving, review and exams. Thursday is usually reserved for laboratory exercises. Sports, trips, outings, etc. are not excuses for missing assignment due dates. You can always turn-in any assignment early, preferably before you leave.

The instructor will be reasonably flexible working around unavoidable conflicts provided students discuss them with him in advance.

1. It will take several days to cover most chapters. There are typically three or four different HW assignments related to each chapter. HW assignments are typically due a day or two after all the material in that assignment has been covered. Do at least part of a HW assignment each night. Homework problems serve as the basis for the quiz problems. If you don't do the homework, the quizzes are that much harder.
2. Each lecture session may begin with a 6 to 10-minute quiz. You must bring your own calculator for working quiz problems. Sharing calculators is not allowed. Quiz questions may cover material covered in earlier lectures. Quizzes may also include questions on any subject covered in any earlier HW assignment. Quiz questions are very closely related to homework problems.

Approximately once a week a day is set aside for problem solving practice or exams. This is in addition to the amount of time spent daily working on problem solving.

3. Once a week, usually on Thursday, we will have a laboratory workday. The lab write-up, including all ancillary attachments, such as graphs, additional exercises, etc., is due one week later. Students who miss a lab workday must meet with the instructor to explain the absence and then perform the experiment before 1st period. The lab write-up due date will be the same for all students and late lab write-ups still count zero even if you missed the lab work day.

If you miss a laboratory workday, you are responsible for picking up a copy of the lab handout. You may **not** copy data from another student. The instructor will either provide you with a set of data or assist you in performing the laboratory exercise for yourself prior to 1st period. The lab write-up due date is the same for all students. Absent, skipping, or otherwise missing students must complete the lab on their own time and finish the write-up by the same due date as all other students, unless special arrangements are made in advance with the instructor.

Many labs include problems that are only available on WebAssign. These problems must be submitted on-line through WebAssign by the separately assigned due date and time.

Some lab problems are printed in the lab handout. If the problems are printed in the handout, then the solutions must be attached to the back of the write-up when submitted with the rest of the write-up on Thursday.

Physics – Trinity Valley School – Dr. Mitchell A. Hoselton

August 11, 2006

4. We also have a number, seven at last count, of lab support activities. These cover mathematical reviews (2), introductions to Excel spreadsheets (2), and introductions to our graphing program, *Graphical Analysis*, and to our mirror and lens analysis program, *GeoOptics*. These activities will be graded and scored as additional laboratory grades. Due dates for these will be announced at the time the assignments are handed out. Usually they are due at the end of one period spent on the computers.

5. Cheating will not be tolerated.

The first instance of copying or sharing, or turning in someone else's assignment will earn a zero on that assignment for both parties. This is true whether the assignment is homework, a lab write-up, a quiz, or an exam. Subsequent instances will earn a zero and will be referred to the Head of the Upper School and the Honor Council.

One place where students may appropriately work together outside of the classroom is on the WebAssign HW assignments provided each student completes his or her own work. The WebAssign problems are different for each student. Working together to understand the methods of solving problems is an acceptable learning activity provided each student completes his or her own problems and understands how to do those problems in the event of a quiz or exam problem of the same type.

6. Each student receives a textbook. Bring it to class with you each day. There are a small number of classroom copies of the textbook available for emergencies. There are not enough of them for everyone to use in class, however. Do not remove the classroom copies of the textbook from the classroom. Use your own textbook for work outside of the classroom.
7. Students who need to work on physics assignments during the day may, with the permission of the instructor, work at the back tables in the physics room during their free periods and before and after school hours. This provides students with ready access to the computers, textbooks and all available physics resources, including questions for and assistance from the instructor.

All physics students are encouraged to use the physics room and the physics computers both before and after school to work on their Physics assignments.

8. Cell phone use is not permitted at any time for any purpose. It does not matter if class is in session or not. Use cell phones and other electronic entertainment devices outside of the school building.

Cell phones will be confiscated if visible and turned in to Mr. Fleming. You will need to visit him to get them back.

Tips for Success

1. Do your homework. Quizzes are closely related to the homework and if you do all the homework your opportunities for success on quizzes are greatly improved.
2. Never assume that you understand a physics concept. Vague knowledge is useless in physics. Study until you are sure you understand each concept. Review the textbook and do solve problems to reinforce that understanding.
3. Never fall behind. Spend **at least one hour** (*for a significant number of students more than one hour will be required*) every day on your physics assignments. Reading and studying will generally take some additional time each day. Stay current. Develop a regular study schedule and stick to it.
4. Read and re-read your lecture notes, handouts distributed in class or available on the Physics web site, and the textbook. Then study each chapter again while you are working the homework problems and laboratory problems. You are responsible for every word of every chapter, every lab, every handout and every lecture associated with this course.
5. Be neat (but not obsessive). If the instructor can't read what you've written, your grade will be zero. Sloppy, messy, crumpled, and otherwise lazy lab and quiz work is subject to point deductions for lack of clarity and readability.
6. Don't disrupt the class. Class time is valuable. Students who need the class time to learn the material will not appreciate receiving less help than they need because you feel entitled to be rude or disruptive.
7. Outside of normal classroom hours, the best time and place to study physics in the Physics Lab is before 9:25 in the morning. The Physics classroom is often, but not always, open in the afternoon. If your instructor is not present, do not go into the classroom. While there you have access to the instructor, the computers, and all the other physics-related materials you might require.

One overriding rule: Always stay in contact with the instructor. Discuss any scheduling problems sooner rather than later. You are responsible for maintaining contact and keeping the instructor informed if you think you need a personal adjustment in the schedule. Do not wait until after you've missed an assignment. By then it is too late.