# **COURSE INFORMATION**

**1. Course Descriptions:** Physics 1250 and 1251 form a two semester introductory series of courses for physics, engineering and other science majors. The class meetings per week are: three lectures, one recitation (two in summer), and one laboratory session (two in summer).

Physics 1240 and 1241 are "bridge" courses designed to handle the transition from quarters to semesters. Physics 1240 covers material not covered in Physics 131 but covered in 1250: Physics 1250 = Physics 131 + Physics 1240. Physics 1240 + 1241 = Physics 133. Physics 1240 and 1241 are half-semester courses. The class meetings per week are: two lectures, one recitation (two in summer), and one laboratory session (two in summer).

The holidays for all classes, as well as particular days on which there are no labs, are indicated in the Syllabus/Assignment Sheet for each course. Quizzes, midterms and the final exam date and time are also stated. **Please check your assignment sheet for the correct date and time of the final exam.** You are required to take the final exam at the appropriate time.

**2. Course Problems:** If a problem with the course cannot be resolved by your recitation instructor, lab instructor, or lecturer, you will need to see one of the course supervisors. The **Physics P125x Course Manager**, Dr. Ziegler, will handle day-to-day problems such as missed exams and labs; therefore, in general you should see him first about absences from class. If Dr. Ziegler cannot resolve your problems, he will refer you to the Vice Chair for Administration.

P125x COURSE MANAGER: Dr. Michael Ziegler, (ziegler, 2@osu. edu), SM 1036A, 614-292-2067.

**3. Prerequisites:** Physics 1250: The prerequisite is 1 entrance unit of Physics or Chem. Physics 1251: The prerequisite is Physics 1250 (131) and Math 1151 (152). Physics 1240: The prerequisite is Physics 131. Physics 1241: The prerequisite is Physics 132. Physics 1240 may be taken concurrently with Physics 1241.

**4. Recitation Policy:** How recitations are handled will be explained in the individual courses. Problems may or may not be assigned specifically for particular days. However you are still responsible for all assigned problems, no matter whether they have been assigned for lecture or recitation, and whether or not they have been covered in class. On-line homework must be submitted by the deadline. Since there is an extended period of time for the completion of on-line homework, extensions will not be granted for last-day computer problems or illness.

**5. Wait Lists**: Please check daily with Buckeye Link if you are on the wait list. For assistance in entering classes after the first week, please come to room 1036 Smith Lab.

# **EXAMS**

**1. Final Exam Schedule:** Please consult your Syllabus/Assignment sheet for details of the date, location, and time of the final exam. The times given in the assignment sheets correspond to the times given on the Master Schedule of Classes. **FINAL EXAMS ARE NEVER GIVEN EARLY**.

2. ODS Exams: Take the ODS form to the P125x Course Manager, who will fill out the form.

**3. Missed Exams:** If you are absent during a midterm or a final examination for a serious unavoidable reason, then contact the P125x Course Manager within 2 weeks of the date of the exam you missed.

If you missed a midterm for a serious reason, such as illness, your absence may be excused. *To have an absence for a midterm excused means that your midterm grade of 0 will be replaced with a grade based on your final exam grade.* 

**Vacation plans are not an acceptable reason for missing an exam.** For exam-related problems other than missed exams, you must contact either your recitation instructor or your lecturer or a course manager within 24 hours of the exam.

**4. Missed Final Exam**: If a student is absent when a final exam is given, the student must seek permission to take a make-up final exam; otherwise, the final exam grade will be 0. *Permission to take a make-up final exam will be granted if the student has a valid reason for the absence and is passing the course.* The final exam must be made up so that a course grade can reach the registrar by Friday of the sixth week of the following semester.

**NOTE**: Scheduling an air flight to depart before a final exam is not an acceptable excuse for missing a final exam.

**5.** <u>**Pre-semester ticket purchases:**</u> If you or your parents have purchased a ticket BEFORE the first day of class, see the P125x Course Manager before the end of the first week of the semester with documentation proving both that the ticket was already purchased and that it was purchased before the assignment sheet or this course information sheet was provided in class. You will not receive an early exam, but you may be allowed to take a make-up exam in the following semester.

6. Other Exam Problems: Must be reported to the P125x course manager within 24 hours of the exam. If an exam or any page of an exam is taken from the classroom, in fairness to other students it cannot be accepted later for grading.

**7. Regrade Request**: Must be made within one week of return of a quiz or midterm, no more than two weeks after the exam has been returned to the rest of the class. Request forms are available on the P125x web page, and in the rack next to room 1011V Smith Lab.

# **QUIZZES**

**1. Missed Quizzes:** In order to take care of unforeseen problems that arise, such as an illness that keeps a student out of school, a certain number of quizzes may be dropped automatically. The lecturer for your course will announce the policy. **The total number of quizzes dropped shall not exceed, without good reason, the number dropped automatically.** If you miss more quizzes than the number that is automatically dropped, and have valid reasons for missing them, then you should see the P125x Course Manager as soon as possible, after the quizzes have been missed, in order to be excused. Unless you have a valid reason for taking longer, such as an extended hospital stay, you must take care of this within two weeks of missing the quiz.

**2. Regrade Request**: Must be made within one week of return of a quiz or midterm, no more than two weeks after the exam has been returned to the rest of the class. Request forms are available on the P125x and P124x websites, and in the rack next to room 1011V Smith Lab.

# LABORATORY

**1.** Lab Manuals: Students need to purchase lab manuals at a campus area bookstore. There are separate lab manuals for each course. Students need to purchase new lab manuals because there are sheets that you write on during the lab in each lab manual. Consult the Syllabus/Assignment Sheet for details.

**2. Missed Labs:** Your lecturer may allow one lowest lab to be dropped; if this is the case, the first missed lab is dropped automatically, *regardless of reason or circumstance*. If one missed lab is not automatically dropped, students who miss one or more labs should get in touch with the P125x Course Manager as soon as possible. Those who can document the reason for the absence may be excused. However, those who make a habit of missing labs will receive zeroes for the missed labs. A scheduled university activity is a valid reason for missing lab; attendance at a rock concert or auto race, for example, is not.

# Exams in other courses also are not valid reasons for missing labs, see "Schedule Conflicts with Other Courses and University Activities" below.

If you have a job interview, you cannot make-up the lab and you will not be excused from it.

To be excused from a missed lab, you must arrange for an excuse within two weeks of missing the lab. Note that generally there are no make-ups for missed labs in order not to overcrowd or interrupt group dynamics in other lab sections.

# 3. Prior Lab Grade: A lab grade from a prior semester is not passed on. All students must attend lab.

What if I exceed the Limit of the Number of Quizzes or Labs dropped Automatically, and Then Missed Another One for a Valid Reason?

The total number of quizzes, or labs, dropped shall not exceed, without good reason, the number dropped automatically. The cases of ALL missed quizzes, or labs, will have to be considered by the Course Manager if you exceed the limit.

### <u>HOMEWORK</u>

### 1. Computer-Graded Homework:

Physics 1250, 1251, 1240, and 1241 use the on-line homework web site *WebAssign*. WebAssign cards, good for two semesters, are included in the textbook package when you buy a new book at a campus-area bookstore. Only new textbooks include the WebAssign cards.

**2. Missed Homework:** Because a week is given to complete each homework assignment, extensions are not granted for last minute illnesses or computer failures. A request for a homework excuse must be in within one week of the missed homework.

### SCHEDULE CONFLICTS

1. Schedule Conflicts with Employment: We will make every effort to assist employed students in scheduling classes at hours that do not conflict with work hours. However, students are expected to make necessary arrangements to take all exams in class on the days and at the times listed in the Syllabus/Assignment Sheet. Bring a letter on your employer's letterhead to room 1036 Smith Lab if there is a conflict. The letter must state specifically on what days and at what hours you are employed. This can only be done after you have been employed, not in anticipation of employment. Please be aware that it is not always possible to accommodate all such requests. Note: If there are no vacant places, it may not be possible to make such changes.

**2.** Schedule Conflicts with Other Schools: Students who are enrolled at other colleges and universities, but who are taking this course at Ohio State, are expected to make the necessary arrangements to fulfill all course requirements. These include attendance in labs and being present for all exams. In particular, activities or classes at another school do not take precedence over exams here.

**3.** Schedule Conflicts with Other Courses and University Activities: Students enrolled at Ohio State should be aware of Rule 3335-7-11 which states that "Regularly scheduled class appointments shall have precedence over any special examinations...," and of Rules 3335-9-21 and 3335-9-22 which state that students may be excused for non-class functions only when specified procedures are followed.

If another course schedules a common midterm that conflicts with your regularly scheduled lecture, recitation, or lab time, university rules require that a make-up midterm must be available at a time when you do not have a regularly scheduled class. You will not be allowed to make up a lab missed because of a common midterm in another class.

### MISCELLANEOUS

**1. Cell Phones:** Calls may not be made or answered in any class. Any student doing so will be asked to leave the class. You must turn off all such phones during an exam. If you answer or make a call during an exam, YOU WILL NEITHER BE ALLOWED TO COMPLETE THE EXAM NOR BE ALLOWED TO MAKE IT UP.

**2. Communications:** When sending email to instructors, it is preferred that you use an osu. edu address to preserve your privacy and to avoid being considered spam. The Federal Right to Privacy Act, FERPA, does not allow us to send personal information to a non-osu. edu email address. Also, do not send email in html format: it may not be read.

**3.** Extra Help: Selected sample midterms, but no finals, may be made available on CARMEN. Your lecturer may provide solutions to midterms, quizzes, and homework on CARMEN.

**4. Grades:** Your lecturer will inform you of the procedures by which grades are assigned on the Syllabus/Assignment sheet. Individual lecturers may require that minimum standards must be met.

**5. Requests for Regrading:** If you believe that there has been an error in the grading or addition of points on an exam or quiz, you must obtain a "Request for Regrading" form by room 1011V Smith Lab. This form, along with the exam in question, must be submitted to your <u>recitation instructor</u> within one week of the date on which the exam was returned to you, but no more than two weeks after it was returned to the class. Requests will not be accepted if more than one week has passed after the exam was returned to the rest of the class unless there is

proper documentation showing that absence from class for more than one week was unavoidable.

If you submit a regrade request form, you <u>must</u> specify the problems to be regraded. For questions about a correct way to solve a problem, please consult your recitation instructor or lecturer. Please remember to indicate ANYTHING you added to the exam after it was returned to you. The material for which a regrade is requested will be compared to a copy of the material made at the time the exam was graded.

If you have two answers to a question on your test paper, neither one crossed out, it will be construed against you, even if one answer is correct.

**6. Section Changes:** Changes in lecture, recitation or lab class times may be effected through Buckeye Link in the first week of the semester if spaces are available. Vacant places in the wait list are filled in order. If you drop the sections you are in to add others, someone else may be put in your place and you may be dropped from the course. If that occurs, you will move to the end of the wait list. Students with a work conflict should bring a letter from the employer on the employer's letterhead to the Office of Undergraduate Services in Room 1036 Smith Lab for assistance with the problem. Students with a course conflict should see the P125x Course Manager. University rules require that a recitation instructor assign a grade of E if a student has not attended the correct recitation. We follow this rule.

**7. Tutoring**: A free tutoring service is available in SM 1011A and B – see the schedule posted there for times. A private tutor list is available at <u>http://tiny.cc/tutors</u>.

# **LEARNING ADVICE**

1. Cognitive Dissonance: You will need to learn concepts which often conflict with "common sense". It is impossible to enter a physics course without bringing to it your (often unconscious) ideas of how the world works: these ideas more often correspond to the physics of Aristotle than to the physics of Galileo and Newton. Therefore, you may often find yourself confused. This "cognitive dissonance", to use a term for the conflict between a preconceived notion and a scientific conclusion, is good, because it is a necessary step on the way to a new level of comprehension. To assist you in this process, the labs are specifically designed to overcome these alternate conceptions and help you make the basic ideas become "common sense" for you. For your part, the important thing is to work your way through this stage of the learning process. Since nothing is achieved without effort, you will need to plan to <u>spend two hours doing homework for each hour in class</u>, whether lecture or recitation or laboratory. You are also expected to attend all classes. The only variable for which psychologists have been able to find a correlation with grades is attendance in class. This is true for all the courses you are taking.

2. Problem-Solving Strategy: Students often are confused as to what constitutes a proper answer to a question on a physics exam. In general, a statement of the correct answer, even if it is known and memorized, will receive no credit. The P125x and P124x courses are concerned with how you solve problems and gain understanding of the underlying concepts. They are never intended to teach you a set of solutions that you simply memorize without understanding the method used to find the solution. Therefore, you should always start with a figure, list what is known and what needs to be found, follow with the basic equations, and derive the result in algebraic symbols. If a numerical answer is required, substitute in only after you have completed the <u>derivation of the algebraic quantity</u> that is sought. The way you learn how to do this is by studying examples and working as many problems as possible.