

## COURSE INFORMATION

### PHYSICS 131-132-133

#### University Required Statement

Physics 131, 132, and 133 are Physical Science courses in the Natural Science category of the GEC. The goals and objectives for this category are:

**Goals/Rationale:** Students in natural sciences gain understanding of the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world.

**Learning Objectives:**

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

**How the Learning Objectives are Met:**

1. Student preconceptions and alternate conceptions of physical law are addressed head-on in Physics 131, 132, and 133. This is a necessary component of any contemporary introduction to physics, and is addressed in all components of the courses.
2. Students learn the scientific theories that have developed from the 1600s to the present day. They learn different modes of approaching the same phenomena, such as force and energy methods in mechanics.
3. Students understand that Physics 131, 132, and 133 introduce the basic physical laws that underlie all engineering applications. Examples of applications are provided in the textbook and in demonstrations in lectures.
4. Students understand that the social implications lie in the applications, and that in the case of physics the social implications are taken up more appropriately in the engineering courses that teach the applications. The reason for this is that physics does not go into details of how to build instruments or devices.

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**Students with Disability:** Please contact a course supervisor at the start of the quarter so that arrangements can be made to accommodate you. Students needing the services provided by the Office for Disability Services (ODS) will need to be certified by that office. The ODS is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

**Assignment sheets:** Assignment sheets are distributed in the first lecture session of the quarter; thereafter, they are available on-line at the P13x web page, and by room SM 1011V. Assignment sheets include information about required textbooks, specific course policies, and grading.

**Textbooks:** Consult the assignment sheets for information concerning the required textbook and lab manual used in a course.

**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 <http://tiny.cc/tutors>.

**P13x websites:** Each of the courses Physics 131-132-133 has a website; these websites may be found on the “Courses” page of the OSU Physics website: <http://www.physics.ohio-state.edu/>. These websites provide general information for

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the P13x courses, and are accessible to anyone. Copies of the Syllabus/Assignment sheet, COURSE INFORMATION, GENERAL COURSE POLICY AND INFORMATION, SUMMARY OF COURSE POLICY, On-Line Homework Instructions for Physics 131, 132 and 133, and the form REQUEST FOR REGRADING can be found there.

**CARMEN website:** <https://carmen.osu.edu/>. This website provides information specific to a course, and is accessible only to those students who are registered in the course. It is here that course announcements, results of exams, grades, etc. may be found. Your lecturer may place a sample midterm, solutions to midterms, quizzes, and/or homework, and other things here. The student should check this website regularly for current information about the course.

**Academic Misconduct:** Not to report academic misconduct is itself regarded as academic misconduct. Everyone in the university community has a duty to report suspected academic misconduct.

**Academic Misconduct in Lab:** Students are not always aware of what constitutes proper academic conduct in a laboratory situation. As a general rule, one should not bring into the lab any material with data taken at other times, or with any sort of answers written in ahead of time, whether in the lab report or in the lab manual or on any sort of substance, paper or not. The presence of any such material in the lab will be considered evidence of intent to commit academic misconduct. Any such materials used for study prior to the lab should be tucked away where they cannot be retrieved easily, in a backpack or other such carrying case. To receive credit, the lab report must be handed in or checked off at the end of the period. If it is removed from the lab, in fairness to other students it cannot be accepted. In no case may a lab report be taken home and be handed in later.

**Academic Misconduct in Lecture:** When credit is given for use of "clickers", use of another student's clicker to obtain credit for that student must be reported to the Committee on Academic Misconduct.

**Academic Misconduct in Recitation:** The procedures of the Ohio State University Committee on Academic Misconduct include the following in the definition of academic misconduct: "Providing or receiving information during quizzes and examinations such as course examinations...". The Physics Department refers all suspected cases of academic misconduct to the Committee on Academic Misconduct and usually follows the committee's recommendations, but there can be exceptions. Exams and quizzes may be photocopied for comparison with exams handed in for regrading. All homework handed in for grading must be your own work. If an exam states that no notes or books may be used, you must demonstrate to your recitation instructor that your calculator memory is clear before the exam begins.

Students are permitted to work constructively with other students, and to obtain help from instructors when solving on-line homework problems. Study by cooperative or collaborative methods is an excellent way to learn and retain understanding. Use of a complete solution or final equation provided by another student, a paid tutor, or any form of web site or consultation defeats the purpose of the homework assignment, and must be reported to the Committee on Academic Misconduct by instructors and other students. Posting of or provision of a complete solution or final equation by any form of transmission to other students, including, but not limited to, those listed above also defeats the purpose of the homework assignment and must be reported to the Committee on Academic Misconduct.

6/6/11