

Physics 132

Fundamentals of Physics 2

Spring 2007

Instructor: Dr. Jeffery A. Spirko, jspirko@po-box.esu.edu
Office: Gessner 200, x3655 or 570-422-3655
Office Hours: MTuTh, 3-4pm, Tu 2-4pm, Th 3-5pm, (F 8am-5pm by appt)
Course Website: ESU Web CT System

Materials: *Physics*, 6th Edition, Cutnell & Johnson, 2004, (Vol 2 OK)
eInstruction.com CPS remote, **NOT the RF version.**
Phys132/162 Laboratory Manual, Cohen, 2007

Overview: Phys132 is a continuation of Phys131. The course covers electricity & magnetism, DC and AC circuits, optics, waves, and possibly the physical nature of light.

Prerequisites: Working knowledge of algebra and trigonometry (no calculus will be required on exams, though calculus-related terms may be introduced and you may accidentally learn something calculus-like). The ability to apply the concepts of Phys131 and to use **vector algebra** will be necessary.

Grades: Grades will be a total of several parts:
20% Labs
20% Hourly Exams (10% each)
20% Final Exam
20% Homework
20% Participation

Labs: PSI Labs are to be completed in Gessner 225 supervised by the PSI instructors. The lab should be available for about 20 hours/week to accommodate student schedules. See the lab policy for more information. Complete the labs at your own pace, but **don't fall behind in labs.**

- Exams:** There will be 2 exams and a comprehensive final exam.
Exam 1 – Chapters 18–20 (Electric forces, potential, and DC circuits)
Exam 2 – Chapters 21–23 (Magnetism, AC circuits)
Final – Comprehensive, including Chapters 18–27 (Above plus Mirrors, Optics, Waves, EM Waves)
An equation sheet will be provided.
- Quizzes:** Occasional in-class quizzes will count as 3 homework assignments each. Many quizzes will require a calculator, so bring it with you.
- Homework:** Homework is required to be completed on time. Remember that I already know the answers, so the important part is to show the **process** by which you get the answer. Since solutions will be handed out shortly after the due date, LATE HOMEWORK WILL NOT BE ACCEPTED.
- Participation:** The participation grade will be between your exam grade and 100%. You get 90% for showing up. Poor attendance will reduce the participation grade (you get 4 free absences). Asking constructive questions in class, getting help during office hours, and generally showing effort to learn the course material will all improve your participation grade.
- Special Needs:** Students who are eligible for accommodations are invited to make an appointment to deliver their letter from the Office of Disability Services and to discuss their accommodation requests.
- In-Class Polling:** The Infrared CPS system will be used to gauge the class. The CPS polling will affect your grade, regardless of which answers are given. The system may be used for quizzes, in which case these answers would be graded.