Physics for Scientists and Engineers II

Physics 202 - Spring 2021

Instructor: Nicholas Cerruti
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Web site: Blackboard Learn (https://learn.wsu.edu/)

Text: *Physics for Scientists and Engineers: A Strategic Approach*, 4th Edition, Randall D. Knight
Ancillary: MasteringPhysics Student Access Kit (for homework)

Prerequisite: Physics 201 or Physics 205 with a grade of C or better; Math 172 or Math 182 with a grade of C or better or placement into Math 273 or higher

Learning Goals: To use physical evidence and context to arrive at correct physical conclusions about the natural world; to solve quantitative problems from a wide variety of authentic contexts and everyday life situations; to use and develop scientific inquiry skill, and amass a body of useful knowledge applicable to the world at large, from personal decision-making to global concerns; to obtain information from empirical experiments and outside sources, evaluate it, apply it in real-world situations, share it with peers, and use it ethically.

Disability: Reasonable accommodations are available for students with documented disabilities or chronic medical conditions. If you have a disability and need accommodations to fully participate in class, please contact the Access Center (Phone: 509-335-3417, E-mail: Access.Center@wsu.edu, URL:accesscenter.wsu.edu) to request accommodations or schedule an appointment with an Access Advisor. All disability related accommodations must be approved through the Access Center. Notify the instructor during the first week of class concerning any approved accommodations. Late notification may cause the requested accommodations to be unavailable.

Academic Integrity: Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Academic integrity will be strongly enforced in this course. Students who violate WSU's Academic Integrity Policy (defined in Washington Administrative Code (WAC) 504-26-010(3) and -404) may loose points on an assignment or exam, fail the assignment or exam, or fail the course. The student will also not have the option to withdraw from the course pending an appeal and will be reported to the Center for Community Standards.

Expectation of Student Effort: For each hour of lecture, students should expect to have a minimum of two hours of work outside of class which includes reading, reviewing lectures and completing assignments.

Course Delivery: The lectures will be delivered synchronously through Zoom during the scheduled lecture time and will not be recorded. Links to the Zoom meetings are posted in Blackboard. Attendance is expected but not required.

Accommodation for Religious Observances or Activities: Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from class or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 – Academic Complaint Procedures.

Grading Policies

1. Percentage weighting:

   100% Homework & Hourly Exams

2. Scale:

   A: 90% - 100%, A-: 85% - 90%
   B+: 80% - 85%, B: 75% - 80%, B-: 70% - 75%
   C+: 65% - 70%, C: 60% - 65%, C-: 55% - 60%
   D+: 50% - 55%, D: 45% - 50%

3. Homework: Every class period homework will be assigned through MasteringPhysics, an on-line homework service for this textbook. Homework is due at midnight on the following class period (except on Fridays, when it will be due on Saturday).

4. Laboratory: See lab syllabus.

5. Hourly Exams: There are 4 hourly exams scheduled which will be given through MasteringPhysics (tentatively). The last exam will be during the scheduled final exam time. There will be NO make-up exams given and a missed exam is counted as a 0. However, your lowest hourly exam grade may be replaced by your homework score.

Schedule

Date	Reading
1/18	**Martin Luther King, Jr's Day - No Class**
1/20	Chap. 22 - Electric Charges
1/22	Chap. 22 -
1/25	Chap. 23 - Electric Field
1/27	Chap. 23 -
1/29	Chap. 23 -
2/1	Chap. 24 - Gauss's Law
2/3	Chap. 24 -
2/5	Chap. 24 -
2/8	Chap. 25 - Electric Potential
2/10	Chap. 25 -
2/12	Chap. 25 -
2/15	**President's Day - No Class**
2/17	Chap. 26 - Potential and Field
2/19	**EXAM I (Chaps. 22 - 25)**
2/22	Chap. 26 -
2/24	Chap. 27 - Current and Resistance
2/26	Chap. 27 -
3/1	Chap. 28 - Circuits
3/3	Chap. 28 -
3/5	Chap. 28 -
3/8	Chap. 28 -
3/10	Chap. 29 - Magnetic Field
3/12	**EXAM II (Chaps. 26 - 28)**
3/15	Chap. 29 -
3/17	**St. Patrick's Day - No Class**
3/19	Chap. 29 -
3/22	Chap. 29 -
3/24	Chap. 30 - Electromagnetic Induction
3/26	Chap. 30 -

Date	Reading
3/29	Chap. 30 -
3/31	Chap. 32 - AC Circuits
4/2	Chap. 32 -
4/5	Chap. 32 -
4/7	Chap. 31 - Electromagnetic Waves
4/9	Chap. 31 -
4/12	Chap. 33 - Wave Optics
4/14	Chap. 33 -
4/16	**EXAM III (Chaps. 29 - 32)**
4/19	Chap. 34 - Ray Optics
4/21	Chap. 34 -
4/23	Chap. 35 - Optical Instruments
4/26	Chap. 35 -
4/28	Chap. 36 - Relativity
4/30	Chap. 36 -
5/4	**EXAM IV (Chaps. 33 - 36)** (Tuesday, 1:00 - 2:30 pm)