

Elements of Physics
01:750:161
Fall 2020

Instructor: Professor Premala Chandra

Summary: Survey of major topics in physics, such as motion, fluids, waves, electricity, electrical circuits, radioactivity, relativity, and atomic structure, with emphasis on developing laboratory and problem-solving skills.

This course is intended for pharmacy students.

Pre-requisites: Precalculus

Co-requisites: none

Meeting times: Two 80 minute lectures per week.
Lecture: T-Th 5 (5:00-6:20 pm)
Laboratory Workshops (3 hours): One/week

Text: Serway and Vuille, edition 11

LMS: Canvas

Provisional Plans for Remote Instruction:

Lecture Slides will be posted on Canvas before the lecture. Synchronous lectures will be conducted using Zoom/Webex with slides and tablet (to emulate use of a blackboard). Demo videos and Java applets to demonstrate concepts will be embedded in class lecture. Iclicker polling will be performed in class with students often in breakout sessions. The full lecture will be recorded and posted on Canvas after class.

Lecturer will hold extended office hours on Canvas.

Laboratory Workshops: Canvas Laboratories will be a hybrid of recorded data retrieval (with the analysis left to the students) and online simulations.

Technology Requirements: Zoom/Webex, Iclicker phone app

Provisional Grading Plans:

Class participation (iclicker polling) : 4%

Laboratory Workshops: 21 %

Homework: 15 %

1st Exam: 15%

2nd Exam: 15%
Final Exam: 30 %

Exams: Multiple-choice, uploaded and monitored testing.

Academic Integrity:

Students are expected to maintain the highest level of academic integrity. You should be familiar with the university policy on academic integrity: <http://academicintegrity.rutgers.edu/academic-integrity-policy/> Violations will be reported and enforced according to this policy.

Use of external sources to obtain solutions to homework assignments or exams is cheating and is a violation of the University Academic Integrity policy. Cheating in the course may result in penalties ranging from a zero on an assignment to an F for the course to expulsion from the University. Posting of homework assignments, exams, recorded lectures, or other lecture materials to external sites without the permission of the instructor is a violation of copyright and constitutes a facilitation of dishonesty, which may result in the same penalties as explicit cheating.

Not only does the use of such sites violate the University's policy on Academic Integrity, using such sites interferes with your achievement of the learning you are paying tuition for. Assignments, quizzes, and exams are given not simply to assign grades, but to promote the active learning that occurs through completing assignments on your own. Getting the right answer is much less important than learning how to get the right answer. This learning is critical to your success in subsequent courses and your careers.

Student wellness Services

Student Counseling, ADAP & Psychiatric Services (CAPS) wellness for non-emergency psychological health issues services (848) 932-7884, 17 Senior Street, New Brunswick, NJ 08901
<http://health.rutgers.edu/medical-counseling-services/counseling/>

Violence Prevention & Victim Assistance (VPVA), (848) 932-1181, 3 Bartlett Street, New Brunswick, NJ 08901, <http://www.vpva.rutgers.edu/>

Office of Disability Services (848) 445-6800, Lucy Stone Hall, Suite A145, Livingston, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854, <https://ods.rutgers.edu/>

Scarlet Listeners for confidential peer counseling and referral hotline, (732) 247-5555,
<http://www.scarletlisteners.com>