UNIVERSITY OF VERMONT

Department of Physics

Physics 12

Spring 2023

General Information

Instructor: Jason Pepe, Innovation Hall 231

Phone: 656-8865

email: Jason.Pepe@uvm.edu

Office Hours: Mon, Wed 1:00-2:00 or by appointment

Materials:

- *Textbook*: "College Physics" by Knight, Jones & Field, 4th Edition, with MasteringPhysics registration code and etext.
- Learning Catalytics: a software extension of MasteringPhysics that will be used to deliver question and answer, tutorial, or simulation exercises
- Pocket calculator with trigonometric functions, scientific notation and exponential functions.
- Smartphone, Tablet or Laptop (laptop preferred): You will need a device that can support a web browser to participate in Learning Catalytics exercises and MasteringPhysics assignments.

Course formatF2 1ob0 0 F7(vo b le5(i)-7l)-7lfF2 1se (c)4(a)1[c(F2 1e)8(esse) 0ntiaT3159t

towards consolidation of the students' grasp of physical principles. The course outline shows the homework assignments for each chapter.

Attendance:

Students are expected to attend all classes and participate in group activities. A student's attendance record provides additional information for assessing a student's overall attitude in the course. It will be used for advising, for documentation in a letter of reference, etc. It is the student's responsibility to keep up with missed material, announcements, etc.

Excuses:

Circumstances beyond a student's control may warrant an absence. Valid excuses for such absences are notes from the academic dean, the attending physician, the team coach, the officiating clergyman, the presiding judge, the arresting officer, etc.

Missing Hourly Exams:

Missing a midterm exam will result in a score of zero unless the student has a valid excuse as defined above. A student with a valid excuse may be given a make-up exam

UNIVERSITY OF VERMONT **Physics 12 - Spring 2023**

Department of Physics **Course Outline**

STUDENTS MUST READ APPROPRIATE SECTIONS BEFORE COMING TO CLASS.

Jan 17, 18, 20, 23, 24	Chapter 20: **Electric Fields and Forces** Questions: 8,16,32,33 Problems: 1,13,18,29,41,54,58,61,68,76
Jan 25, 27, 30, 31 Feb 1	Chapter 21: **Electric Potential** Q: 6,8,11,15,17 P: 13,17,19,33,51,60,63,72,75,82
Feb 3	Chapter 22: **Current and Resistance** Q: 10,21,27 P: 11,19,23,29,54,64
Feb 6, 7, 8	Chapter 23: **Electric Circuits** Q: 17,26,27,38 P: 5,16,28,35,47,66,77
Feb 10, 14, 15, 17, 21, 22	Chapter 24: **Magnetic Fields and Forces** Q: 13,15,18,26,30 P: 6,10,17,23,31,33,45,48,58,70
Feb 15	**EXAM I - Chapters 20, 21, 22, 23 6:40 pm**
Feb 24, 27, 28 Mar 1, 3, 6, 8	Chapter 25: **Electromagnetic Induction and Electromagnetic Waves** Q: 3,11,15,18,28,29,36 P: 4,12,17,20,21,36,47,54,64,65,71,74
Mar 10, 21, 22, 24, 27	Chapter 17: **Wave Optics** Q: 4,6,8,17 P: 1,8,21,25,31,37,46,49,57,61
Mar 22	**EXAM II - Chapters 24, 25 - 6:40 pm**
Mar 28, 29, 31 Apr 3	Chapter 18: **Ray Optics** Q: 6,9,12,25,26,27 P: 7,23,35,41,45,66,69,70,72,82
Apr 4, 5, 7, 11	Chapter 19: **Optical Instruments** Q: 10,17,23,24 P: 1,17,22,29,40,47,58,60
Apr 12, 14, 17, 18, 19, 21	Chapter 27: **Relativity** Q: 3,16,18,21 P: 5,9,13,23,32,35,40,43,65,67,70
Apr 12	**EXAM III - Chapters 17, 18, 19 - 6:40 pm**

Apr 24,eW*nBT/F8 9.96 Tf1 0 (