University of Vermont
Physics 152: Fundamentals of Physics II
Electricity & Magnetism
Spring 2019

PHYS 152 Course Syllabus

Instructor

Prof.	Adrian Del Maestro
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Office Hours

Wednesday	10:45 – 12:45 PM
By appointment.	

Teaching Assistants

TAs:	Alina Karki	Xiaozhi Zhang
Email:	`Alina.Karki@uvm.edu`	`Xiaozhi.Zhang@uvm.edu`
Office Hours:	Friday 10:00 AM – 12:00 PM	Friday 12:00 – 2:00 PM
Location:	Discovery 4th Floor Lounge	Discovery 4th Floor Lounge

Getting Help

Physics Department Help Sessions

There will be two hours (or more) per week of departmental help sessions on topics related to Physics 152. See the posted schedule and online (`https://www.uvm.edu/cas/physics/help-sessions`) for details.

Tutoring Center

The Tutoring Center works with any undergraduate student at the University of Vermont and tutoring is provided at no additional cost. For more information visit: `https://www.uvm.edu/academicsuccess/tutoring_center`

Outline

This is the second semester of a year-long introduction to calculus-based elementary physics. Topics include electrostatics, circuits, magnetostatics, induction, light, geometrical and physical optics. Pre-requisites include PHYS 031 or PHYS 051; previous credit or concurrent enrollment in MATH 022 is also required.

Course Format

Three lectures per week on Monday, Wednesday and Friday from `9:40 AM - 10:30 AM in Stafford 101`. New material will be presented and students must complete the pre-lectures and checkpoint assignments by `11:59 PM` the day before the relevant lecture. There will be a laboratory activity every week.

Online Content

BlackBoard

All course details and announcements will be available on BlackBoard at `http://www.bb.uvm.edu`. You are required to be aware of anything posted to the course website.

FlipItPhysics

Course content, schedule, pre-lectures and checkpoints are available at `flipitphysics.com`. The course access key needed to sign up is: **e1d6f36f**.

SaplingLearning

Weekly homework assignments are delivered via Sapling Learning (`saplinglearning.com`). For instructions on registering for the course, a video tutorial is available at `https://macmillan.force.com/macmillanlearning/s/article/Sapling-Learning-Registering-for-courses`.

Materials

- Timothy Stelzer, Mats Selen and Gary Gladding, *smartPhysics: Volume 2, Electricity & Magnetism*, (2016).
- Pocket calculator with trigonometric functions, scientific notation and exponential functions.

Grading

Grade inquiries will not be addressed via email. If you find an error in grading, please visit and discuss with Prof. Del Maestro during office hours.

3 Term Tests	24%
Final Exam	25%
Sapling Homework Problems	20%
FlipItPhysics Pre-Lectures & Checkpoints	6%
Participation & Attendance	5%
Laboratory	20%

Important Dates

Tests and Exams

Test 01	Friday February 01, 2019	9:40 – 10:30 AM	Stafford 101
Test 02	Friday March 01, 2019	9:40 – 10:30 AM	Stafford 101
Test 03	Friday April 05, 2019	9:40 – 10:30 AM	Stafford 101
Final Exam	Thursday May 09, 2019	7:30 – 10:15 AM	Stafford 101

Tentative Lab Schedule

Date	Activity
01/17	Electric Charge Tutorial
01/24	Electric Fields & Equipotentials Experiment
01/31	Exam Review (test March 1st)
02/07	Capacitance Tutorial
02/14	Circuits Experiment
02/21	Group Problem Solving & Presenting
02/28	Exam Review (test March 1st)
03/07	Magnetism Tutorial
03/14	No Lab (Spring Break)
03/21	Measuring Magnetic Fields Experiment
03/28	Induction and Motors Experiment
04/04	Exam Review (test April 5th)
04/11	Electromagnetic Waves Tutorial
04/18	Group Problem Solving & Presenting
04/25	Optics Experiment
05/02	Final Review (Final May 9th)

Policies and Expectations

- *Participation* – The participation grade will be determined by your preparedness and level of engagement during lectures. Each Friday, we will devote a portion of class to answering general physics questions posed and uploaded to a BlackBoard wiki by students. Although not all questions will be answered, each student must upload at least one question to receive a perfect score for participation.

- *Attendance* – Attendance will not be formally taken. However, unexcused absences will be noted and considered. A student's attendance record provides additional information for assessing their overall attitude in the course. It will be used for advising, the participation grade and for documentation in a letter of reference. It is the student's responsibility to keep up with missed material, announcements, etc.

- *Pre-Lectures and Checkpoints* – Pre-lectures must be watched and checkpoint assignments finished by 11:59 PM on Sunday and Thursday evening. The first set will be due on Sunday January 13th, the day before classes start, so make sure you get your FlipItPhysics account set up early.

- *Homework* – Homework problems serve as illustrations of the lecture material and are essential to ensure the students' grasp of physical principles. The course calendar shows the homework assignment for each unit. They are due on Saturday night at 11:59 PM.

- *Tests & Exams* – There will be three hourly exams based on lecture, homework and FlipItPhysics material. The final examination will be cumulative and cover material from the entire course.

  Important: This course requires students to become familiar with formal calculations. Numerical answers are only used in the online work to verify the correctness of your reasoning. Exams require formal calculations for full credit!

- *Missed Work Policy* – Often, circumstances beyond a student's control warrant an absence. Valid reasons for such absences must be documented by notes from the academic dean, the attending physician, the team coach, the officiating clergyman, the presiding judge, the arresting officer, the FEMA official etc. Merely being seen by a physician is not a valid reason, neither is a sibling's out-of-town wedding, a planned family vacation etc.

- *Missed Term Tests* – Missing an hourly exam will result in a score of zero unless the student has a valid reason as defined above. A student with a valid reason may be given a make-up exam **before** the time of the scheduled exam.

- *Missing the Final Exam* – Missing the final examination will result in a final course grade of F unless the student has arranged with the instructor through the appropriate academic dean for an "Incomplete."

- *Religious Holidays* – Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.

- *Technology in the Classroom* – Laptop computers are not permitted in the classroom unless individual permission has been given by the instructor due extenuating circumstances. Please come to office hours to arrange such permission. Students using laptop computers will be asked to sit in the first two rows. Cell phone use is not permitted in class, please turn them off before entering the classroom. Repeat offenders may see grade point deductions.

- *Student Learning Accommodations* – In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan. Contact SAS: A170 Living/Learning Center; 802-656-7753.
`https://www.uvm.edu/academicsuccess/student_accessibility_services`

Contact Student Accessibility Services (SAS)	A170 Living/Learning Center 802-656-7753 `access@uvm.edu`

- *Student Responsibilities and Rights* – Academic Integrity: This policy addresses plagiarism, fabrication, collusion, and cheating: `http://www.uvm.edu/policies/student/acadintegrity.pdf`. Grading Appeals: `http://www.uvm.edu/policies/student/gradeappeals.pdf`.