PHY127: Classical Physics C Spring 2023

PHY127 is part of a three-course sequence in calculus-based, introductory-level physics. PHY127 focuses on electromagnetism and covers electrostatics, electricity and electric circuits, magnetism, electromagnetic induction and electromagnetic oscillations and waves. The emphasis is on understanding fundamental concepts and developing the mathematical formalism to apply them in the solution of problems in electromagnetism. The other two courses in the sequence are PHY125 and PHY126, which, together, cover mechanics, fluids, waves, thermodynamics, and optics.

Prerequisite: C or higher: PHY 125 or 131 or 141
Corequisite: MAT 126, 132, 142, 171 or AMS 161 or level 7 or higher on math placement exam.

Instructors
Prof. Emilio Mendez
office: Physics Building, Room B142
phone: 631-632 8065
emilio.mendez@stonybrook.edu

Prof. Vladimir Goldman
office: Physics Building, Room B137
phone: 631-632 9001
Vladimir.Goldman@stonybrook.edu

Textbook
Physics for Scientists & Engineers, 5th edition
Douglas C. Giancoli, Pearson Prentice Hall
PHY127 will cover chapters 21 to 31, both included.
Students will need to have access to the Pearson’s Mastering platform, which will be used for weekly homework assignments. The Study Access Code students bought for PHY125 will normally be valid for PHY127, depending on the date and conditions of purchase. In some cases, it may be necessary for students to buy a new code.

Lectures
Tuesday 8:00 am – 9:20 am
Thursday 8:00 am – 9:20 am
Prof. Mendez
Harriman 137
Prof. Mendez
Harriman 137
First day of class: January 24
Last day of class: May 4

Recitations
Rec. 01: Mon. 9:15 am – 10:10 am
Rec. 02: Wed. 9:15 am – 10:10 am
Rec. 03: Mon. 10:30 am – 11:25 am
Rec. 04: Mon. 11:45 am – 12:40 pm
Rec. 05: Wed. 11:45 am – 12:40 pm
Prof. Goldman
Frey Hall 224
Prof. Mendez
Frey Hall 224
Prof. Goldman
Frey Hall 224
Prof. Goldman
Physics P117
Prof. Mendez
Frey Hall 224
Start the week of January 30.

Office Hours
Tuesday 9:45 am – 11:30 am
Wednesday 10:15 am – 11:30 am
Prof. Mendez
Physics B142
Prof. Mendez
Physics B142
**Homework** Weekly assignments from Pearson’s website MasteringPhysics.com
Due on Wednesdays at 11:59 pm

**Evaluations** Weekly quizzes during Recitations
Two mid-term exams (February 23 and April 6)
Final exam (May 16).

**Blackboard** Used for course announcements, distribution of lecture material, and weekly homework assignments (via Blackboard-linked Pearson’s Mastering)
The lectures will be videorecorded (via Echo) and available on Blackboard after the lectures.

**Grades** **Numerical grade**
10% Homework; 15% Quizzes
40% Midterm Exams (20% each); 35% Final Exam
5% Dynamic Study Modules (extra credit)

There is **No Curve Grading** in this course

**Letter grade**
100 ≥ A ≥ 90  89 ≥ A’ ≥ 85
84 ≥ B+ ≥ 80  79 ≥ B ≥ 75  74 ≥ B’ ≥ 70
69 ≥ C+ ≥ 65  64 ≥ C ≥ 55  54 ≥ C’ ≥ 50
49 ≥ D ≥ 45  44 ≥ F ≥ 0

**Study Tips** *(Adapted from Giancoli, p. xviii)*
Before class, read textbook sections to be covered in class; get familiar with vocabulary and notation. Do extra-credit Dynamic Study Module.
Attend all classes, both lectures and recitations. Watch recorded sessions if you couldn’t come to class or would like to review some of the material.
After class, read textbook material covered in class, paying attention to main concepts, details and worked-out examples. Do homework problems corresponding to material covered that day in class.
Academic Integrity
Each student is accountable for all submitted work. Representing another person's work as your own is wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic integrity website at http://www.stonybrook.edu/commcms/academic_integrity/index.html.

Americans with Disabilities Act
If you have a physical, psychiatric/emotional, medical or learning disability that may impact on your ability to carry out assigned course work, you should contact the staff in the Disability Support Services office [DSS], ECC (Educational Communications Center) Building, Room 128, (631)632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. https://web.stonybrook.edu/newfaculty/StudentResources/Pages/DisabilitySupportServices.aspx Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the website http://www.sunysb.edu/ehs/fire/disabilities.shtml.

Critical Incident Management
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.

Religious Observances
The academic calendar has no religious holidays. See the List of Religious and Other Holidays and other relevant links at http://www.stonybrook.edu/commcms/provost/faculty/handbook/employment/list_of_religious_and_university_holidays#view-s2018 Students will be expected to notify the lecture- and/or recitation-instructor(s) by email, in advance, of their intention to be absent for any religious observance during the Spring 2023 semester. They can discuss with their instructor(s) before then how they will be able to secure the work covered.