PHY 132.01, Fall 2025 Course Syllabus

Physics 132.01 has one main section which meets MWF 8:00 – 8:55 in Humanities 1003 and will be live-streamed over Echo (caveats below). In addition to the PHY 132.01 each student must enroll in 1 (of the 4) recitation sections. A recitation section meets once per week starting in the *2nd week* of the semester.

The primary topics for the course are electricity, magnetism, electromagnetic waves, their applications and optics. Specifically, we cover material in Ch. 21 - 35 of the optional text book (See below). The mandatory portions of the course are: (1) interactive responses (formerly "clickers") during the main section, (2) online homework assignments, (3) 2 midterm exams, (4) a final exam and (5) recitation. In addition, extra credit videos will be available on Brightspace.

You get the maximum benefit from the lectures and homework problems if you take a look at the material and problems before the classes for that week, including studying the (electronic) textbook. This way you are already introduced to the material and you can focus on the pieces you may not have understood and maybe even have questions ready. This is not required, but experience shows this is very beneficial for mastering the material.

Although it is not a formal requirement that the two courses be taken simultaneously, most Phy132 students also take the corresponding lab, Phy134, in the same semester that they take Phy132. If you also need or want Phy134, you must register for that separately from your Phy132 registration. This syllabus covers only Phy132.

Several techniques and general concepts from Phy131 continue to appear this semester: trigonometry, vectors, Newton's Laws, conservation of momentum and energy, and waves all appear again.

Instructor(s)

The Phy132 professors are:

- Sec. 01, John Hobbs, Physics D139, 632-8107. John.Hobbs_at_stonybrook.edu
- Recitations, Profs. Dao and Tsybychev: Valerio.Dao_at_stonybrook.edu and Dmitri.Tsybychev_at_stonybrook.edu
  - R01 – Mon, 11:00 – 11:55, Heavy Engineering Lab 201; Prof. Dao
  - R02 – Wed, 10:00 – 10:55, Physics P129; Prof. Tsybychev
  - R03 – Mon, 2:00 – 2:55, Frey 226; Prof. Tsybychev
  - R04 – Wed, 2:00 – 2:55, Physics P117; Prof. Dao
- Office hours:
  - Prof. Hobbs: Fri., 1:00 – 2:00, and Tue. 3:00 – 4:00
  - Prof. Dao: Wed., 3:00 – 5:00
  - Prof. Tsybychev: Wed. 1:00 – 3:00

For the actual email addresses substitute @ for _at_. The best way to reach your instructors is by email; put Phy132 somewhere in the subject line of your message to get their attention. Instructors get hundreds of emails every day. For email regarding recitation, send the email to your recitation instructor and CC Prof. Hobbs.

Brightspace and Course Administration

Most of the course administration will be done via Brightspace. Please make sure that you have access to your Stony Brook Brightspace account, that this course is listed there (in 1st week of classes for sure), and that the email address listed in your account is one that you monitor. You have to register your to VEVOX via Brightspace; see below.

Calendar

The Brightspace course calendar shows the chapter(s) that will be covered in each lecture. There may be small adjustments during the semester, so do keep an eye on this. Click on a given class period to see the chapter expected to be covered that day.

Firsts for this Semester: Details for each of these items are below, but the "first days" are gathered here for reference,

- First *Interactive Responses* for credit (registered in Brightspace): **9/5** (Practice runs: **8/27, 8/29, 9/3**)
- First *Homework* for class due (submitted online; **9/7, 11:59 PM**)

Interactive Response (used to be "clickers")

The University is switching to a new response system, VEVOX. This is a web-based system (start it) and does not need any clicker hardware or special app. You connect to it via any web browser. Follow the instructions (in the Brightspace Content area) to log on. We will have practice runs (no credit, see schedule above) to check the registration process and get used to the system. All problems must be sorted out by 5:00 PM Sep. 4.

During the lecture, when you are working on one of the interactive "clicker" questions, you may discuss the problem quietly with your immediate neighbors. This is intended to help you understand the problem and solve it. "The answer is C" is not the kind of discussion intended here - you deprive yourself of the opportunity to learn and prepare yourself for the exams.

One person responding as more than themself (i.e. doing your friend's log in for them) is clear academic dishonesty, and will result in zero credit for the response score and be reported to the Academic Judiciary for both people.

Bring a calculator to the lecture. It should be able to do trig functions, square root, log, exponential notation. You do not need a fancy graphing calculator. You will also need your calculator for the exams. Your calculator is an important tool for the course, and you should be familiar with it. Calculators may not be shared in the exams. You may not use the calculator function of a cell phone in the exams.

Homework and (optional) Textbook

Homework problems will be assigned using Mastering Physics. You get there from "Content" section in Brightspace. You must connect via Brightspace to link your license with our course. Instructions to do this are at

https://help.pearsoncmg.com/integration/cg/student/content/get_started.htm

If you do not have a valid license (from last semester), you will need to purchase a new one. The textbook is *"Physics for Scientists and Engineers with Modern Physics" by Giancoli, **5th** edition*, the same as last semester. The Mastering Physics license plus e-text, ISBN 9780321992277, is available from Pearson, the bookstore and from Amazon. There will be online problems assigned approximate once per week, and they will be due at 11:59 PM on the following Sunday. (i.e. the problems for material the week of Sept. 1 will be due Sep. 7.) The first assignment is due Sep. 7 and will cover 2 weeks instead of the usual 1 week. Because of holidays and exams, some weeks won't have any HW due, but the following week will have 2 HW's due.

If you connect before the semester starts, you should see one homework called "Introduction to Mastering Physics (optional, no credit)". This one is optional. There is no credit for it. It's just "How To's" helping you learn to use the Mastering Physics interface.

Getting help/Echo

Echo Recording An echo recording of the class periods will be available. To see the echo recordings either go to Brightspace in the "Content" area or log on to echo360 directly. When logging in to echo directly, use your SBU email address.

We point out the following two items from the echo system information for instructors:

- "With all technology, there is the possibility of a hardware/software failure. Students should not rely on these recordings as their sole source of instruction. "
- "…failure for a recording to occur does not count as a legitimate excuse for lack of student performance." We expect that students attend class in person.

The point of this is that you shouldn't rely on the technology in the echo, especially in real time. *If there are tech problems because you aren't in Humanities 1003, I (and SBU) cannot help you with them.*

Office Hours: To help you with questions related to the course, instructors hold office hours every week. In addition, the Phy134 Lab TAs also have office hours. The office hour schedule (and location) will be made available in the first week of the semester.

Exams

Two Midterm exams are scheduled on **Wed. Sep. 17, 8:15 PM – 9:35 PM**, and **Tues. Nov. 4, 8:15 PM – 9:35 PM**. The **final exam** is **Thurs. Dec. 11**, **2:15 – 5:00 PM**. You have to make sure there are no conflicts in your schedule – we will not grant a makeup exam for schedule conflicts. The registrar's policy that students have responsibility for avoiding exam conflicts is crystal clear, and exceptions will not be granted in this course. If you cannot take a midterm due to exceptional circumstances (documented illness or death in the immediate family), discuss with the instructor as soon as possible. We will increase the weights of the other parts of the course accordingly but not have make up midterm exams. If you miss the final with a valid excuse, you will receive an **I**ncomplete in the course and a makeup final will be scheduled as promptly as possible after the end of the semester.

Extra Credit Videos

There are extra credit videos posted on Brightspace accessible from the Content section. The video due dates correspond to the day of the exam that the corresponding material will be covered on. That is, videos whose material will be on Midterm 1 are due by the start of Midterm 1. They will be available on the first day of class, and can be done any time up to the due date.

Grades

Your course grade will be based on the following.

- 15% Homework
- 15% Response/Clicker score (50% is participation; 50% is correct answer)
- 15% Recitation score (Your recitation instructor will explain the scoring)
- 10% Midterm 1
- 20% Midterm 2
- 25% Final Exam
- 3% Extra Credit Videos

The lowest 5 daily response scores (by percentage) and lowest 2 homework scores (by percentage) will be dropped when grading. The drops are to allow for technology problems, poor network, etc. It is your responsibility to make sure you are properly registered.

The course grades will be curved and extra credit points are added after the curve is determined.

There are no extra credit or other special supplementary assignments available except for the videos described above.

Student Accessibility Support Center Statement

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Academic Integrity Statement

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Professions, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

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. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Course Materials and Copyright Statement

Course material accessed from Brightspace, Zoom, Echo 360, etc. is for the exclusive use of students who are currently enrolled in the course. Content from these systems cannot be reused or distributed without written permission of the instructor and/or the copyright holder. Duplication of materials protected by copyright, without permission of the copyright holder is a violation of the Federal copyright law.