PHY 121 (Studio), Fall 2019 Course Syllabus

The combined course of PHY 121.90 & PHY 121.L90 has one section which meets Monday and Wednesday from 8:00 - 9:20 am, and Friday from 8:00 – 9:50 am in Physics room P-119. This course will cover Chapters 1-16 of the electronic textbook described below.

Instructors

- Prof. Michael Wilking <michael.wilking@stonybrook.edu>
  Physics D-106, Office hours: Monday 1-3pm & Tuesday 1-2pm
- TA Chris Strohsnitter <christopher.strohsnitter@stonybrook.edu>
- TA John Meier <john.meier@stonybrook.edu>

Prof. Wilking's office hours are held in his office. TA office hours are listed on the TA helproom schedule.

Blackboard

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

Calendar

The calendar shows the material that will be covered in each lecture. Labs will be held on Fridays, although some Fridays will be devoted to additional lectures or in-class exams.

Firsts for this Semester:

- First *Clickers* for credit (clicker must be registered in Blackboard): **9/9**
- First *Homework* for class due (submitted online): **9/6**; First bonus deadline: **9/4**.
- First *Lab Session*: **9/6**.
- First day the Help Room is staffed: **9/3**

Format of course

Class meeting time is used for a combination of lecture, problem solving practice, and short answer questions in class for credit. You should come to the lecture prepared by reading the corresponding section of the etext, and attempting (although perhaps not finshing) the homework assignment. The lecture will be used to review material, and for questions you answer with response pads (or app) by Turning Point Technologies ("clickers").

Required clickers (or app) are from Turning Point Technologies. The clickers are available in the campus bookstore. More information is below.

Required Homework problems will be assigned using an online system called Mastering Physics. Additional information is given in the Homework section below.

Laboratory

The laboratory is mandatory. There are ten lab sessions during the semester. All lab grades count; none are dropped. If you have an excused absence from your regular lab period, you must arrange to make up the lab with the course TAs.

A lab write up that completes all of the items listed in the manual for each individual lab is due one week from the date of each lab. In addition, 3 formal lab reports will be required for designated labs throughout the semester. More information about the format and grading of the lab reports will be given in class.

All students are required to complete all 10 labs. Any student missing one in-lab session and not making it up at the makeup session that is specifically scheduled to include that particular missed lab will have the letter grade for PHY 121 dropped by one letter! Any student missing more two or more in-lab sessions will fail PHY 121! This has happened to students in previous semesters, so please make sure this does not happen to you.

Clickers

The bookstore sells clickers or you may download the Turning Point app for iPhone or Android. Whether you buy one new or reuse one from a previous semester you need to register it through Blackboard. Follow the instructions (in the Black Board documents area) to register your clicker. If your clicker breaks or you lose it, you must register the replacement again. We will have clicker dry runs (i.e. no credit) to check the registration process. All clicker problems must be sorted out by the first date for which clickers count for credit, as listed above. **We will not go back and retroactively transfer scores because of clicker problems.** This is in part why we drop a number of clicker days (see below).

During the lecture, when you are working on one of the 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 operating more than 1 clicker/app (i.e. doing your friend’s clicker/app for them) is clear academic dishonesty, and will result in a course grade of F and report to the Academic Judiciary for the owners of both clickers.

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 mobile phone in the exams.

There are no recitations. The lecture functions as a recitation, insofar as you are guided towards learning how to solve problems on the material in the lecture notes and in the homework problems

Homework and Electronic Textbook (etext)

Homework problems will be assigned using an online system called Mastering Physics (see below). There is a link on the course blackboard page through which you access and register for Mastering Physics. There will be online problems assigned separately for each Monday & Wednesday lecture (e.g. Ch3_1 and Ch3_2 for Chapter 3 material with Ch3_1 associated with the first day of the material and Ch3_2 associated with the second. These are sync’d to the course calendar). However, both homework assignments for a given week are actually due at 11:59 PM on Friday.

You should attempt the problems BEFORE each lecture, so that you can get the maximum benefit from class participation and receive a good lecture grade. To reward early effort, a 20% bonus is given for all problems submitted by 8 pm the day before the corresponding lecture, e.g. all Ch3_1 problems solved by 8 PM the day before the Ch3_1 material on the course calendar). It is a true bonus, applied at the end of the term after fixing the letter grade thresholds. This bonus for each homework will not appear in Mastering or in Blackboard. The total bonus will appear in Blackboard at the end of the semester.

Mastering Physics and Electronic Textbook: You must have a Mastering Physics license for the course (a license is good for two semesters!). This is obtained via the blackboard link for the course. We have negotiated with the publisher to provide you with access to 2 different textbooks for the course (for the standard 1-book price!) to allow you to use whichever resource works best for you, as both books cover the same material. This semester, we will primarily be following “College Physics” by Etkina, Planinsic, and Van Heuvelen.

Getting help

To help you with questions related to your homework problems and the laboratory, the **Help Room, Physics A131**, will be staffed full time to the extent that we can. The schedule will be posted on the help room and on Blackboard before the 2nd week of classes.

Exams

Two Midterm exams will be held in-class on Friday, October 4th and Friday, November 8th. The **final exam** is Friday, December 13th at **2:15-5:00 PM**. You have to make sure there are no conflicts in your schedule – we cannot grant a makeup exam. The registrar's policy is that students are responsible for avoiding exam conflicts, 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 this 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 exams. If you miss the final with a valid excuse, you will receive an Incomplete in the course and a makeup final will be scheduled as promptly as possible after the end of the semester. The exams will be multiple choice, graded via scantron sheets (fill in the bubble with a #2 pencil).

Grades

Your final grade will be based on the following.

- 15% Homework
- 10% Clicker score (50% is participation; 50% is correct answer)
- 15% **Each** of two midterms
- 25% Labs
- 20% Final Exam

The lowest 5 daily clicker scores, and lowest 3 homework scores, will be dropped when grading. No lab scores will be dropped.

There are no extra credit or other special supplementary assignments available, beyond the early bird bonus described above.

Academic Honesty

Academic dishonesty will not be tolerated. In this course, the standards are as follows. In lecture, when a “clicker” question is posed, you may discuss it with your neighbors. However, one person operating more than 1 clicker is cheating, and will result in a course grade of F and report to the Academic Judiciary for the owners of both clickers. You may work with your colleagues on the pre- lecture quizzes, the homework problems and the preparation parts of the lab reports.

However, please note that you only hurt yourself if you submit answers that you get from somebody else and you do not understand. In lab, you and your partners are collecting the same data, and you may discuss subsequent steps of analysis with your partners and other people. However, you may not submit data that you did not participate in collecting as if it were your own. Doing so will result in a course grade of F. In an exam, copying answers from another person or use of materials or communication other than what is allowed by the instructors will result in an F in the course.

Standard University Policy

ELECTRONIC COMMUNICATION POLICY FOR ALL STONY BROOK STUDENTS: Email to your University email account is an important way of communicating with you for this course. For most students the email address is 'firstname.lastname@stonybrook.edu', and the account can be accessed here: http://www.stonybrook.edu/mycloud. **It is *your responsibility* to read your email received at this account.**

For instructions about how to verify your University email address see this: http://it.stonybrook.edu/help/kb/checking-or-changing-your-mail-forwarding-address-in-the-epo . You can set up email forwarding using instructions here: http://it.stonybrook.edu/help/kb/setting-up-mail- forwarding-in-google-mail . **If you choose to forward your University email to another account, *we are not responsible for any undeliverable messages*.**

ACADEMIC INTEGRITY. 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 Technology & Management, 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.

DISABILITY SUPPORT SERVICES (DSS). If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748 or http://studentaffairs.stonybrook.edu/dss/. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

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.