PHY 121/123 Syllabus, Fall 2016

Physics 121 has one section which meets Tu, Th 8:30 - 9:50 am in Room 100 in the Javits Lecture Center.

Physics 123 has multiple sections all of which meet in the “A” level of the Physics Building.

Instructors

The Phy121/workshop instructors are:


Office Hours: Wed, 1-3 in the office or in the Help Room. Note: for the actual email addresses, substitute @ for (at). The Phy123 Instructor is:

- Prof. Klaus Dehmelt, Physics C108, 632-8115. Office Hours: See Help Room schedule or TBA. Klaus.Dehmelt (at) stonybrook.edu

Note: for the actual email addresses, substitute @ for (at).

Prof. Dehmelt is responsible for all parts of the lab. The best way to reach your instructors is by email; ATTENTION put “Physics 121” or “Physics 123” in the subject line of your message to get their attention.

Calendar

This shows the material that will be covered in each workshop, the labs that will be running in a particular week and the dates of the exams. You can find it here [https://calendar.google.com/calendar/embed?src=stonybrook.edu_2sukta12n4q2juhnbo0q0d7k%40group.calendar.google.com&ctz=America/New_York]. If the (new university) class schedule causes Religious observation conflicts, please discuss this with the professor during the first week of classes. The chapter numbering, e.g. Ch5_1, which is lecture 1 of chapter 5 matches the naming of the downloadable lectures. The textbook chapter numbering is different and the correspondence between our lecture chapter numbering and the textbook numbering can be found here [http://www.ic.sunysb.edu/Class/phy121re/General/cortable.html]

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 therein (by the week before classes start), and that the email address listed in your Blackboard account is one that you monitor. You have to register your “clicker” via Blackboard.

Format of course

This course differs from the usual format!!

Class meeting time is used for workshops with clicker quizzes in class for credit (10% of grade). You should come to the workshop prepared because you have viewed the recorded lecture and worked on (maybe not yet finished) the homework assignment. The workshop will be used to review material, and for quizzes you answer with response pads by Turning Point Technologies (“clickers”).

Required lectures you must read and watch before coming to workshop are recorded flash movies. All Lectures will be posted publicly here
Required Text Book: A print edition of College Physics, 3rd edition, by Knight, Jones, and Field, Pearson is available in the campus bookstore for $304.26 dollars. If you purchase the text, you automatically get the online homework license. The eText with access to Mastering Physics costs $113.95 dollars when purchased online from Pearson. The license to access Mastering Physics without the etext costs $65.95 dollars - must be purchased online from Mastering Physics. There are several copies on reserve in the Math-Physics Library. The order of material in our note chapters differs from that of the text book. A correspondence table is available here [http://www.ic.sunysb.edu/Class/phy121re/General/corbable.html]

Required clickers must be purchased from the Turning Technologies online store which can be accessed after logging on to (or creating) your account at Turning Technologies [https://account.turningtechnologies.com/account/] for $60.99 dollars. More information is below.

Required Homework problems will be assigned using an online system called Mastering Physics. There will be problems assigned for each workshop day, due at 11:59 PM the day of workshop. Our course ID is MPHOBBS82732. Additional information is given in the Homework section below.

LABORATORY

The laboratory is mandatory. There are ten lab sessions plus an online introductory lab. You must register for a lab in Physics 123. Your grade for the workshop part of the course and for the lab part will be the same! All lab grades count; none are dropped. If you have an excused absence from your regular lab period, there will be several scheduled make-up lab times when you can make up one lab (each time) that you have missed. You need to make up a missed lab in the make-up week that lab is available (see course schedule). If you cannot meet this schedule due to exceptional circumstances (such as documented illness or death in the immediate family), discuss with your lab instructor and schedule a make-up lab with him/her.

You must attend ALL lab sessions; missing the in-lab work for more than one lab gets you an automatic “F” for the “Mother course”, PHY 121, as well as for the Lab course PHY 123! If you miss the in-lab work for one lab, your combined grade for both courses will drop by one letter, e.g., B+ to C+, A to B, etc. “Missing” means you did not attend the regularly scheduled session when that particular lab was done by your lab section AND you did not attend the specially scheduled make-up session that included that particular lab.

If you have a valid and documented excuse for missing your regularly scheduled lab session, contact your TA immediately by email. Make-up periods are scheduled for groups of labs; you may make-up a lab you missed for a valid reason only during the particular makeup period that includes that lab! To repeat: 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 both PHY 123 and its parent course PHY 121 dropped by one letter! Any student missing more two or more in-lab sessions will fail both PHY 123 and its parent course PHY 121! This has happened to students in previous semesters; make sure you are not one of them. Note well: you cannot make up a particular missed lab at just any of the three make-up in-lab sessions that are scheduled: you must go to the specific in-lab make-up session that is scheduled to include that particular missed lab.

There is a rigorous cap of 30 students in each lab which will not be exceeded. If you cannot get the lab you want, we suggest that you register for an open lab and hope to rearrange with a section switch once classes start. But you must attend the lab for which you are registered until you have made such a switch. If you do make a switch after the 4th week of semester you must email Prof. Dehmelt to let him know, otherwise credit you received for any labs before the semester may be lost!

CLICKERS
With the changes to the university bookstore, if you need to purchase a clicker you now have to do this through your Turning Technologies [https://account.turningtechnologies.com/account/] account. You still will need to register it through Blackboard. Follow the Clicker Registration Instructions [https://it.stonybrook.edu/help/kb/registering-a-clicker] to register your clicker.

During the workshop, when you are working on one of the quizzes, you may discuss the problem quietly with your immediate neighbors. This is intended to help you understand the quiz 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 is clear academic dishonesty, and will result in a course grade of F for the owners of the clickers who will be reported to the Academic Judiciary.**

Bring a calculator to the workshop. 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 or PDA in the exams. **There are no recitations.** The workshop functions as a recitation, insofar as you are guided towards learning how to solve problems and answer questions on the material you have studied in the flash videos and/or the Etext and the homework assignments.

## Homework

Homework problems will be assigned using an online system called Mastering Physics. You get there from "Assignments" in Blackboard or directly at masteringphysics.com [http://masteringphysics.com]. (Cost of the Mastering Physics License: 113.95 dollars with etext, 65.95 dollars without etext - must be purchased from Mastering Physics online). There will be problems assigned for each workshop day. The homework is due at 11:59 PM on the day when the workshop meets. However, you should attempt the problems BEFORE each workshop, so that you can get the maximum benefit from class participation and receive a good workshop grade. To reward early effort, a 20% bonus is given for all problems submitted by 8 PM the day before the workshop (i.e. 28 hours before the real deadline). This bonus will not appear in Mastering or in Blackboard during the semester. It is a true bonus, applied at the end of the term after fixing the course curve and will appear in Blackboard at the semester's end.

## Getting help

To help you with questions related to your homework problems and the laboratory, the Help Room, Physics A131, will be staffed by personnel from this course, full time to the extent that we can. The schedule will be posted on the help room and on Blackboard within the first week of classes.

The help room is most useful when you have already made a real attempt to solve the problem(s) yourself so that you go for help, you have a specific question or questions which highlights what you don't understand.

## Exams

**Two Midterm exams are scheduled 8:45-10:15 PM on October 5 and November 10. The final exam is December 15, 2:15-5:00 PM. You have to make sure there are no conflicts in your schedule** – we cannot grant a makeup exam for any foreseeable circumstances. 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. 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% Workshop "clicker" score
- 15% Each of two midterms
- 25% Labs
- 20% Final Exam

The lowest 5 daily clicker and lowest 3 homework scores will be dropped when grading. You are expected to use this budget for singly missed workshops. No lab (prelab or in class) scores will be dropped. The penalties for a missed Lab Preparation Quiz are as described for a missed lab execution above.

There are no extra credit or other special supplementary assignments available, beyond the early bird homework bonus described above. Your course grade is based on the same exams, workshop, homework, and labs as everybody else. Please do not embarrass yourself by coming to the instructors at the end of the semester and saying that you need to receive a particular grade higher than the one you earned. You will have plenty of feedback about your performance as the course proceeds.

Academic Honesty

Academic dishonesty will not be tolerated. In this course, the standards are as follows. In workshop, when a "clicker" question is posed, you may discuss it with your neighbors. However, one person operating two clickers is cheating, and will result in a course grade of F for the owners of both clickers. You may work with your colleagues on the pre-workshop quizzes 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 partner are collecting the same data, and you may discuss subsequent steps of analysis with your partner 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 Policies

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 are required to report any suspected instance of academic dishonesty to the Academic Judiciary. 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 [http://www.stonybrook.edu/commcms/academic_integrity/index.html]

RELIGIOUS HOLIDAYS. If the schedule of homeworks, exams or other assignments is in conflict with your religion's Holidays, please let the instructors know in an email by the end of the first week of instruction, and we will do our best to accommodate your needs. Please note that we cannot make changes in the course schedule after the first week of classes. No consideration will be made if someone approaches us in this matter at a time close to the due date or the exam date. Note that the allowed missed homework (3 dropped) and in class clickers (5 dropped) can be used if desired for religious observance.

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/ [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 Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, and/or inhibits students' ability to learn.