Physics 1331 – General Physics I

Class Schedule: 16 weeks starting Aug 22, 2016
Lecture: Robertson R16  12:10pm - 1:00pm MWF mandatory!

Instructor: Dr. Birgit Mellis
Phone: 713-525-2129
e-mail: mellisb@stthom.edu  (please put the course name in the subject line of your emails, e.g. “Gen Phys I”)
Office: Robertson Hall, Room 112

Office Hours:

Tue: 9:00am-11:00am
Wed: 1:00pm-5:00pm
Fri: 2:00pm-3:00pm (only by appointment)
Other times and days: by appointment

Course Description:
Phys 1331 is the first semester of a one year, non-calculus based introductory course in Physics which covers kinematics, dynamics, thermodynamics, oscillations and waves, optics, electromagnetism and atomic physics.

Course Objectives:
Students will learn topics out of mechanics, oscillations and waves, and thermodynamics. This includes both conceptual understanding and problem solving based on non-calculus mathematics.

Math Prerequisites
Math 1331 (Pre-Calculus, Algebra & Trigonometry) or equivalent or permission by instructor.
(Equivalent meaning that you must already have approved knowledge of algebra, geometry and trigonometry. Calculus doesn’t count as a prerequisite.)

Textbook:
Lecture PowerPoints (posted on blackboard)
free online Source: OpenStax College: College Physics , download at http://cnx.org/content/col11406/latest/
(printed copies can be purchased through website: http://openstaxcollege.org. )
Be aware that the PowerPoint chapters covered in lecture might not always have the same chapter number or follow the same order than the online source (see schedule for more detail)

Blackboard:
Blackboard (http://gregory.stthom.edu) will be used to post the Lecture PowerPoints, grades, homework problems, other assignments, announcements, and most of the quizzes. Therefore you need access to the internet during the semester! Please check blackboard frequently to look for new assignments or announcements.
All computer and blackboard problems or any technical questions should go to: University Help Desk, Robertson B112, 713-525-6900
Exams:
In order to get credit for any solved problems you have to show all your work starting with the formula! Units have to be carried along during calculations. Only Texas Instruments TI-30X calculators (or similar non-graphing scientific calculators previously approved by instructor) are allowed during an exam or final.

Exam Schedule and Content (tentative)
- Exam 1 – 16 Sep (F) – Ch 1-3
- Exam 2 – 14 Oct (F) – Ch 4-6
- Exam 3 – 11 Nov (F) – Ch 7-9
- Final – to be announced

All chapters covered in lecture will be part of the comprehensive Final!

Grading:
Your final semester grade will be calculated as follows:
- 50 % Exam Grade = total of three Exam grades
- 25% Final Grade (If any higher, the Final grade will also replace the lowest Exam grade.)
- 10% Homework
- 10% Quizzes
- 5% Class Attendance and Participation

The letter grade for the course is based on the Grading Scale:
- A: (94-100) %, A−: (93-90)%
- B+: (87-89)%, B (84-86), B− (80-83)%
- C+ (77-79)%, C (74-76)%, C− (70-73)%
- D+ (67-69)%, D (60-66)%
- F (0-59)%

Makeup policy:
No makeup exams will be given. If an exam is missed, that will be treated as the exam to be dropped in favor of the final. If for some reason you must miss an exam you are required to: i) let the instructor know BEFORE the regularly scheduled exam time that you will not be able to make the exam; ii) be prepared to DOCUMENT why you missed the exam. Use the email and/or phone information above to contact the instructor.

Homework:
Please keep a notebook (no loose sheets of paper!) with your worked homework problems. Hand in 40 problems (consisting of at least 10 problems from each chapter covered previously in class) on the day of each exam/ final for your homework grade. Exams will test your ability to solve problems of intermediate difficulty. All possible homework problems will be posted on blackboard. There are no required problems. Your homework grade will be based on the total number of problems which you attempt to work and will be collected on the day of each exam.

To receive credit you must:
- hand in homework on exam day at the beginning of class before we start on the exam
- show all your work (not just solutions but calculations respectively explanations for conceptual problems)
- be neat and legible (if I can’t read it I can’t grade it!)
- put a box or circle around your final result
- start a new page for each problem (except for Multiple Choice and Conceptual Questions)
- put your name on your work

You can often receive credit for a problem even if you do not get the correct answer-- as long as you show serious effort in tackling the solution. There will be no credit for handing in homework late!
You will find that the value of homework and class participation is MUCH greater than the 15% of your term grade which they are worth together. It affects your exam grades heavily!

**Quizzes:**

Quizzes will be given to assess your understanding of the material we covered previously in class. Typically they will be given via blackboard or randomly in class whenever we have finished one chapter of the PowerPoint lecture. The online quizzes have to be completed on blackboard before you come to the next class. All scheduled online quizzes will be posted in Blackboard under “Assignments”. So please check blackboard at least once every week to look for new assignments or announcements!

**Attendance:**

“The University expects all students to be regular and punctual in class attendance. Frequent unexplained absences may result in a student being administratively withdrawn from the course or in a grade reduction or failing grade, at the discretion of the faculty member” (see also Undergraduate Catalog).

Each unexcused absence from class, including absence at the start of the lecture, may result in a one-percent decrease in the final semester numerical grade, or in dropping one homework or quiz score. Conversely, 5% of your total grade is based upon your class attendance and participation.

**Accessibility and Accommodations**

Reasonable accommodations will be made for students with disabilities according to the University’s policy. If you need special accommodations please see the instructor and the Office of Counseling and Disability Services (CDS) located on the second floor of Crooker Center; Phone: 713-525-6953 or-2169.

**Academic Honesty**

All students are subject to the university’s Policy on Academic Dishonesty and the UST Student Handbook. This extends to any quizzes taken online via Blackboard.

To be a little bit more specific:

You may not use material in a test, quiz, or exam which is not allowed; turn in someone else’s work in completion of a test, quiz or homework, remove or copy an exam without the instructor’s permission; plagiarism; copy information from someone else’s test, quiz or any graded homework. Cheating will be punished in accordance with University procedures.

**Some Last Advice….**

- Come to class
- Read, as best you can, chapters before coming to class.
- Do all assigned homework problems (and then some... physics is solving problems, not memorizing facts). This will help you to do much better on your quizzes and exams. If you have difficulties solving problems start by going over some examples from the PowerPoints or the textbook
- Build study groups with other students for…solving problems, preparing for exams, having fun with physics….It helps a lot to discuss problems/difficulties with others. In real life, scientists always work in teams, too!

I hope you all have a great semester and do very well in physics!

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