Welcome to Physics 1308

General Physics II

Charles-Augustin de Coulomb
1736-1806
Announcements

• Assignments:
  - Reading: Chapter 21 ALL
  - Watch Video: https://youtu.be/-bwa6oohIk (16:40 - end)
  - Read the syllabus and homework policy
  - Review the handout on significant digits

• Homework 1 Assigned - due before class on Tuesday, August 28th.
  - Numerical answers to WileyPLUS problems and answers to all WileyPLUS questions should be entered into WileyPLUS
  - You must also generate a set of written solutions to ALL your assigned questions and solutions to ALL your assigned problems for each assignment. One of those problems or questions will be randomly selected and graded each week for methodology.
  - Written solutions will need to follow the homework policy and will be graded according to that policy. We expect that you will produce good-quality homework solutions! Points will be lost for not adhering to the homework guidelines.
Announcements

- **WileyPLUS:**

  - Please make sure you setup an account, if you don't already have one from last semester.

  - You have the next few days to get this done. Remember: the WileyPlus portion of the homework must have numerical answers entered into the WileyPlus system.

  - If you have problems, try getting help from Wiley first. If that doesn't resolve the problem, let me know.
Course Instructor

Professor Jodi Cooley

Office: 151 Fondren Science
cooley@physics.smu.edu

TA Jasmine Liu

shilunl@mail.smu.edu

Availability

Course: Tues & Thurs. 9:30 - 11:00 pm
Office Hours:
TBD

Fill out doodle poll by NOON on Wednesday (Aug. 22).
https://doodle.com/poll/acakrq3ndtrfdxmr
This poll should be filled out for a generic week — not specific dates!
Course Website

The course website contains general information about the course, announcements, and links to the Lecture videos you are required to view before coming to each class.

http://www.physics.smu.edu/cooley/phy1308/

Textbook

You will need access to WileyPLUS 10e. If you purchased this last semester and have your registration code — you are set, there is no need to purchase any additional textbook or software. Just log in and register for our section.

WileyPLUS

Introductory Physics
Section: PHYS 1308 - 001: General Physics II
Term: Fall 2018
Instructor(s): JODI COOLEY-SEKULA
Email(s): jsekula@smu.edu

Find your course
· Visit www.wileyplus.com/go/coursefinder
· Enter your course ID, 656062

Course ID: 656062
WileyPLUS Demo
How to Do Well in the Course

• Everyone in this class has a chance to earn an A. There is no “curve”.

• Do all the homework sets and turn it in on time! (No credit for late homework).

• Study in small groups (make sure you are contributing to the group as much as you are absorbing from it)

• Attendance: Come to class. Although attendance is not required — you are an adult — judge for your self; ... how many SMU courses were you able to master by just staying at home and reading the book

• Corollary: Don’t expect to be able to brush off the course for a whole semester and learn everything by cramming for a whole day prior to the exam, it also doesn’t work to eat burgers all semester expect to lose 10 lbs by going to the gym for 24 hrs straight? Don’t waste time on last minute all-nighters.

Your Grade:
- 15% Homework
- 5% Quizzes
- 60% Midterm exams
- 20% Final Exam

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Expectations

What to expect from me

• An interesting and thought provoking course
• Consideration and fairness (this does not mean easy!)
• Availability & approachability to talk to about any difficulties & questions
• Punctuality

What I expect from you

• Sincere effort
• Honesty
• Homework should follow the homework guidelines on the course website.
• Punctuality
What is Plagiarism?

http://www.smu.edu/StudentAffairs/StudentLife/StudentHandbook/HonorCode

PLAGIARISM\textsuperscript{5} Intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise.

5 In regards to cases of plagiarism, ignorance of the rules is not an excuse. The University subscribes to the statement on plagiarism which appears on page six of William Watt's An American Rhetoric (1955).
Plagiarism

• It is plagiarism to copy your homework/exam/quiz solutions from the Instructor Solution Manuel.

• It is plagiarism to copy the homework/exam/quiz solutions from another student (current or previous).

• It is plagiarism to copy the solutions to your homework/exam/quiz from google.

• Academic honesty means that you acknowledge your sources! This includes people in your study group.

I will report future incidents of plagiarism to the Honor Council. If you have any questions about academic honesty in this class, please feel free to talk to me during office hours.
Details

- In general you can expect that you will have a homework assignment every Tuesday and it will be due before 9:30 am the following Tuesday.

- You will have a quiz on the preassigned reading material and preassigned video lecture. This materials should be read/viewed before class. It is a closed book/electronic device quiz (no computers, kindles, iPads, phones, electronic aids, etc). However, you can use any notes that you took that are on paper.

- Class time will be devoted to interactive “think, pair, share” problem solving, demonstrations and discussion. It will not involve lecturing. Lectures are online and should be viewed before coming to class.
Quiz Time
Review Key Concepts

Charge:
An intrinsic property of the fundamental particles that make up objects.

Like charges repel
Opposite charges attract

Conductors:
materials through which charges pass easily
examples:
metals (copper, silver, aluminum, etc), human body, tap water

Insulators:
materials through which charges can not move freely
examples:
plastic, glass, chemically pure water

Semiconductors:
materials that fall somewhere in-between
examples:
silicon and germanium
Demonstrations
Question 1

If a cat repeatedly rubs against your cotton pants on a dry day, the charge transfer between the cat hair and the cotton pants can leave you with an excess charge of -2.00 µC.

You will gradually discharge via the floor. If instead of waiting, you immediately reach towards a faucet, a painful spark will appear.

In that spark, do electrons flow from you to the faucet or vice versa?

The electrons from me to the faucet.
Question 2

If a cat repeatedly rubs against your cotton pants on a dry day, the charge transfer between the cat hair and the cotton pants can leave you with an excess charge of -2.00 µC.

You will gradually discharge via the floor. If instead of waiting, you immediately reach towards a faucet, a painful spark will appear.

If instead the cat reached a paw towards the faucet, which way would the resulting electrons flow?

The electrons flow from the faucet to the cat.
The End (for today…)

I hate to break it to you, but what people call ‘love of majors other than physics’ is just a chemical reaction that compels undergrads to worry about the wrong things. It hits hard, then slooooowly fades, leaving you stranded in an unhappy major. I did it, your friends are going to do it...”