Syllabus for Physics 1116 Online Summer Professor Jeff Steele

Course:	General Physics II		
Professor:	-	<u>steele@randolphcollege.edu</u> 540)-425-4533 (cell)	
Text:	Required: Fundamentals of Physics, 9ed (ninth edition), by Halliday, Resnick, and Walker Please note that you can also get the extended version or you can get the shortened version. The text also comes in two parts, but you need both parts for 1115 and 1116. You may find this book on the College bookstore website, or probably cheaper on Amazon, much cheaper if used. You may use an electronic version.		
	Required: In addition, you need the ExpertTA homework service. This is purchased by semester, so you will need to pay for it this spring in order to do homework. Registration Link: <u>http://goeta.link/USA48VA-C99DD9-2FR</u>		

Optional: Study Guide

Course Comments:

This course is the second half of a calculus based comprehensive survey of basic physics. This course covers topics in mechanics (gravitation, equilibrium, fluids), electricity and magnetism (the study of forces, fields, circuits, and waves), and optics (electromagnetic waves, light) at a level appropriate for beginning physics majors, pre-medical students and science majors. We will cover approximately three chapters every week or a bit more. The goal of this course is to train your physical intuition, to give you a basic understanding of electricity and magnetism in the world around us, and to teach you the tools needed for effective problem-solving.

Registration Add/Drop Information

To drop or withdraw, email the course instructor who will forward your email to the Registrar. The date of your email will be the date used for the course drop/withdrawal. Consult with the Registrar about dates for your drop as it pertains to course refund and transcript notation.

Course Schedule (Homework due dates on ExpertTA)

Week 1:	Chapter 12 - Equilibrium
	Chapter 13 - Gravitation
	Chapter 21 - Electric Charge
Week 2:	Chapter 22 - Electric Field
	Chapter 23 - Gauss' Law Exam 1 assigned 7/16, window closes 7/20. Covers Chapters 12, 13, 21, 22
	Chapter 24 - Electric Potential
Week 3:	Chapter 25 - Capacitance Exam 1 due 7/20
	Chapter 26 - Current & Resistance
	Chapter 27 - Circuits
Week 4:	Chapter 28 - Magnetic Fields Exam 2, covers Chapters 24-27
	Chapter 29 - Magnetic Fields Due to Currents
	Chapter 30 - Induction
Week 5	Chapter 31 - Electromagnetism & AC Exam 2 due Additional Topics
Week 6	Exam Review Final Exam Due Midnight, Wednesday 8/11/21

Course Lecture

Direct lectures will be done via pre-recorded video lecture, from the professor (not outside sources). Videos will include the presentation of the concepts and example problems solved.

Office hours

Office hours are by appointment.

As you see by the schedule, the class will move quickly, approximately three chapters per week. There will be one **homework** assignment due for each chapter. Homework is generally due one week after being assigned, please monitor the dates as indicated on theexpertta.com. Part of the homework must be done by Friday as explained elsewhere.

- **Tests** will cover 4-5 chapters, and there will be two during the semester. Tests are untimed, paper/pencil (upload a scanned copy to Moodle to submit), and you will have a 72 hour window during which to download, work on, and submit.
- The final is comprehensive, with a larger emphasis on materials from Chapters 28-31 (material covered after exam 2)

Grading

Grading will be determined as follows:

- Homework: 30%
- Exam 1: 20%
- Exam 2: 20%
- Final Exam: 30%

If you do the regular homework assignments, then it is worth 30% of your grade. The more additional homework you do, the more the homework counts, and the less the exams count. If you get all the extra homework points, it is worth 40% of your grade (an additional 10%) and the weight of the exams goes down 10%. If you get half the extra homework points, homework will count as 35% of your grade and the weight of the exams goes down 5% equivalently, etc.

Honor Code and Responsibility

Take responsibility for your work and yourself. You are expected to complete all homeworks and exams by the policies outlined for the assignments, on time. Honor is of utmost importance in the academic atmosphere and is taken very seriously by me. I encourage people to work together on homework and labs, but the finished product must be your own work. I would encourage anyone to come to me with a problem that has kept you from doing your work, so that we can work something out, rather than just taking a zero, or worse yet, cheating and possibly failing the class. I will feel free to give you freedom, but then the conduct of the Honor System instituted at Randolph College is in the hands of the students

Accommodations for Students with Disabilities

Students with disabilities needing accommodations in summer online classes at Randolph College may send any requests for accommodations and accompanying documentation to <u>droy@randolphcollege.edu</u>.

Students enrolled at other colleges or universities may submit current letters of accommodation from their home school. Students who are not currently receiving accommodations and would like to inquire about receiving them in summer online classes at Randolph College can send any pertinent documentation or inquiries to the Coordinator of Disability Services at the email address listed above.

Communication

I plan on using Moodle to communicate. Homework assignments and solutions, exam hints and solutions, schedule changes and guidelines (such as those listed here) will all be on the web so that you can access them anytime, and even print them out if you would like.

Link to Zoom (Office Hours): https://us04web.zoom.us/j/5671268182?pwd=ajJ3MHJyN1Q4aFZ3blVpUzJWMTBHQT09

Text: 540-425-4533