

Lecture location: N/A  
Lecture time: N/A  
Instructor: Dr. Sarah Sojka  
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**Office hours:**

Monday 10-11 a.m.  
Tuesday 2-3 p.m.  
Wednesday 5-6 p.m.  
Thursday 10-11 a.m.  
Friday 2-3 p.m.

Additional office hours are available by appointment. Office hours will be conducted through Zoom. Use the link on the course Moodle page to log-in. If you log-in and do not connect with me, please send me a text message (sometimes Zoom sends me to one place and you to another). You are also welcome to call, text or e-mail at any time.

**Recommended text**

We will use OpenStax College Physics which is available for free at <https://openstax.org/details/college-physics>.

You will also need to sign up for ExpertTA. You will need to sign up again and pay for the second session even if you were in PHYS 1105.

The registration link is available on Moodle.

**I. Course goals**

This course is the second half of an algebra-based physics class. It covers equilibrium, fluids, waves and sound, electricity, magnetism and optics. This class is appropriate for beginning science majors, students with a physics concentration, pre-medical students and general education students. Each class will be focused on describing how a specific phenomenon works. We will use a lot of demos and available online simulations (<https://phet.colorado.edu/en/simulations/category/physics>). Understanding physics can take some time and you will need to put in a lot of time outside of class to understand the material.

**II. Policies**

*The Honor Code:* All students are expected to conduct themselves with integrity. You are encouraged to study and work on the homework together, but all final written assignments (homework and exams) must be your own work! Please note that all tests and written assignments in this class are pledged work under the Randolph College Honor Code. Please note that it is a violation of the honor code in this course to look at exams and homework assignments from other offerings of this course, whether concurrent or past, regardless of the instructor of the course. If you are not familiar with the Randolph College Honor Code, you can obtain more information at <https://www.randolphcollege.edu/academics/honor-code/>. If you still have questions, I will be happy to discuss this with you.

*Attendance:* Your attendance in this class will be watching the online videos and working through the sample problems. You can do this at any time that you like but assignments for Monday, Tuesday and Wednesday must be completed by 11:59 pm on Wednesday and assignments for Thursday and Friday must be completed by 11:59 pm on Saturday. Assignments include homework on ExpertTA, watching lecture videos and working sample problems and demonstrations on Moodle. A list of tasks will be provided each week and will sometimes include interactive online activities.

Randolph College is committed to providing learning experiences that are accessible for all students and will make reasonable accommodations for individuals with documented disabilities. If you have a disability and require accommodations, please contact Diane Roy, Coordinator of Access Services, at 434-947-8132 or [droy@randolphcollege.edu](mailto:droy@randolphcollege.edu).

If you have a Letter of Accommodations from Access Services, I encourage you to discuss your accommodations and needs with me as early in the semester as possible.

### **III. Grading**

Homework will be assigned daily, except on the days of the exams. You are encouraged to work together on the homework, but the final product must be your own work! All homework is to be submitted on-line by the due date (Wednesdays and Saturdays). Your homework grade will be reduced by 10% for one day delay, 20% for two days delay, and 30 % for more than two days delay. Homework problems will not be solved in class. You are welcome to contact with me if you have questions. There will be three tests and the material will build throughout the semester.

20% Homework

15% Participation

15% Exam 1

15% Exam 2

20% Exam 3

10% Video problems from exams

5% Forum posts (2 per week)

Participation is defined as completing all of the tasks presented in Moodle. You should mark your progress using the Moodle progress bar to document your work in the class. You will need to submit a video or schedule a meeting with me to show you explaining one problem from each of the tests. Submitting these videos is 10% of your course grade. In addition, you will make 2 posts to the Moodle discussion forum each week. You can use this to ask a question of me or your classmates or to answer a question.

### **V. Course schedule**

Week 1	Equilibrium and fluids
Week 2	Oscillations and waves
Week 3	Electricity
Week 4	Electricity continued, Magnetism
Week 5	Optics