



DEPARTMENT OF PHYSICS

PHYS 172: Succeeding in Physics: Applications, Resources and Concepts

Syllabus

Prof. Peter Shawhan – Spring 2021

Scope and purpose of the course

PHYS 172 has been created as a supplementary course to help students in PHYS 171 who will benefit from having additional instruction and support as they tackle the physics major curriculum. This 1-credit course will meet once per week to focus on asking and addressing questions, applying concepts and solving problems, and discussing some connections to the wider world of physics and STEM careers. Course topics will be selected to reinforce or complement things being taught in PHYS 171. The course title for PHYS 172 may be a little contorted, but it forms a fun acronym and represents our goal of helping all students beginning the Physics Major program get a good start to learn well and succeed.

Instructor

Prof. Peter S. Shawhan (he or they), pshawhan@umd.edu

Phone: 301-405-1580 (currently forwards to my cell)

Office: room 2120 in the Physical Sciences Complex (PSC) building

Cell phone: 240-606-2898

Class meetings

Wednesdays, 10:00-10:50, as Zoom sessions. Please join the Zoom session with video; it's a small group and it will help us interact better.

Support outside of class meetings

Let's use the ELMS Discussions and/or Chat feature so that I can help you all, if needed, with PHYS 171 material outside of class. I pride myself on being able to give instructive hints, for instance. You can also communicate with me one-on-one if you prefer.

Course work, grading and its connection with consistent participation

The main goal of this course is to help students learn the PHYS 171 curriculum better, so the grading scheme for this course is Satisfactory or Fail. Attendance at all or nearly all of the class sessions is expected. If you are sick, have a family emergency or a religious observance or have some other reason why you need to miss a class, tell me about it and that will be an excused absence.

I may assign questions or exercises in or out of class that I believe will help you learn and be worth your time, but there will not be many, since we'll mostly focus on what you are doing in PHYS 171. I will ask you periodically to write (briefly) about physics concepts and problem-solving techniques that you have learned or that you have found challenging, and we will discuss them in class to help all students to understand learning styles, conceptual challenges and success strategies.

I will not normally record class sessions, but if you are out sick, I can record the class for your use, assuming the other students are OK with that.

Course materials

Only the PHYS 171 course materials are needed – nothing more.

Course policies

All of the standard university policies at <http://www.ugst.umd.edu/courserelatedpolicies.html> apply.