SYLLABUS

INSTRUCTORS AND LOGISTICAL INFORMATION

CLASS TIME

Strongly advised to watch Lectures Monday, Weds and Friday. Tutorials will be held via Zoom at their regularly scheduled time.

TEXTBOOK

College Physics 2e, Etkina / Planinsic / Van Heuvelen

INSTRUCTOR

Professor Tristan Ursell
Office: 375 Willamette Hall
Email: tsu@uoregon.edu
Office hours: Tues 11:00 am – 1:00 pm, email for availability at other times.

ASSISTANTS & OFFICE HOURS

This course has about 12 graduate student teaching fellow (GEs). The head GE is: Trevor Brunnenmeyer tbrunnen@uoregon.edu

In general this term, office hours will be offered via Zoom during the normal lecture times (MWF 12 – 1 pm and 2 – 3 pm).

EMAIL

We will try to respond to emails in a timely manner. Emails written in a disrespectful tone (e.g. starting with “Yo Prof Ursell”), with slang (e.g. “ur” instead of “your” or “you’re”), or without full sentences will receive no response.

.zoom

• Prof. Ursell’s office hours and all exams will be hosted through: https://uoregon.zoom.us/my/ursell and https://uoregon.zoom.us/j/6532556396
• See Canvas assignments for Zoom links for Tutorials.

CALM

There is a lot of information swirling around and probably uncertainty and maybe even fear. Here are a few concepts to help you out:

• Establish a daily routine!
• now is a good time to cultivate a mindfulness practice, many videos exist on youtube to facilitate this.
• I urge you to read only reliable sources regarding Coronavirus information -- that includes public health authorities, CDC, UO. There is a lot of fear and rumoring going around social media – verify sources and information before disseminating.
- self-care during these times is key, get enough sleep, drink lots of water, get sunshine and fresh air, and seriously ... don't drink frequently (alcohol is an immuno-suppresant that makes you more susceptible to illness).

### Course Description and Materials

#### Course Description

This is the third installment of the general physics sequence without calculus – you will need to be fluent in trigonometry and algebra. Our topics primarily focus on electricity and magnetism in simple physical systems. These are the physical principles that underlie nearly all of modern, high-tech life, so whether you love it or not, this material is relevant and powerful – we recommend that you work hard and engage with this challenging and fun material.

#### Materials

- Due to the Coronavirus situation this class and all its materials will be only be offered remotely. Video recordings of lectures and slides, PDFs of the slides, and tutorial worksheets will all be available at the start of each week of the term via Canvas (canvas.uoregon.edu).
- Lectures will have video feed of the slides as well as a live recorded lecture of Prof. Ursell discussing material and recording relevant demos. The software we are using (Panopto) will also have question inserted in the lectures to answer, and you can download them and watch them at any pace (even sped up!)
- All office hours and tutorials will use Zoom.
- You may find it useful to have a ruler and pencils to sketch out forces and vectors, both for homework and office hours.
- Readings from our textbook will be posted on Canvas. Do the readings before watching the lectures!

#### Readings

Reading the book is crucial for success in this class, simple as that. Reading assignments will be posted to Canvas.

#### Techniques for Problem Solving

1. Draw clear diagrams indicating the situation.
2. Think about the principles involved -- write them down!
3. Write down the quantities that are known and the quantities you want to know.
4. State any appropriate equations, and relate them to (3).
5. Write down numbered steps indicating the logical progression of your reasoning, and your subsequent calculation.
6. Clearly mark your answer (underlined or in a box).
7. Don’t forget units! Check your significant figures.
8. Check your answer to see if it is reasonable. E.g. perform an “order of magnitude” estimate. Use your sense – if question asks you to estimate the static electricity force between a feather rubbed on plastic, and you calculate 103,456 N of force (about 23,000 lbs), then clearly something is amiss.
### Assignments and Assessments

| **Canvas** | We will extensively use Canvas (canvas.uoregon.edu) for all dissemination of class assignments, readings, videos, grades, etc – make sure you have an account and know your way around the website. **Pay attention to the announcements from Canvas – that is how we communicate with the class and important updates are often given via Canvas.** |
| **Homeworks** | Homework assignments will cover topics discussed in class, and are intended to guide you in thinking further about the concepts we are exploring. Homeworks will typically be a number of problems modified from the book and/or constructed by Prof. Ursell. Homeworks will be submitted through the Pearson website. You will have approximately a week for each homework. Tutorials are an excellent place to discuss homework! You are encouraged to discuss homework assignments and readings with others, though your “final answers” should be your own – direct copying is not allowed, and evidence of such will result in a 0% score on the offending homework. Many of the book homework problems have solutions online – I cannot stop you from using them, but I can promise you that students who put in the effort and work through the homework on their own (or with friends) statistically do better than those that plagiarize solutions from the internet. We will be on the lookout for this – if we detect plagiarism, you will receive a 0% on the offending homework. If it happens more than once, you will be given an F for the course. |
| **Tutorials** | • On Canvas there are individual Zoom links for each tutorial section. • Tutorials will be administered at the times of your normal section via Zoom. You are welcome to communicate with GEs about joining another scheduled tutorial section for scheduling reasons. |
| **Lecture Prep. Assignments** | **Defunct for Spring 2020** Frequently, there will be reading or video assignments that are not graded but for which you must answer questions to receive credit. These assignments prepare you for the coming lecture, and thus have the capacity to significantly impact your grade. |
| **Exams** | • Exams will concentrate on material covered since the last exam, however, some multiple choice questions will probe earlier material. There will be one midterm around week 5 administered via Canvas, and one final exam during exam week in June, also administered via Canvas. • Exams will take place via Canvas and will be open book and you may use a calculator (though generally not required). They will occur over a scheduled window (likely 2 hours at a particular time). • Any of the following are considered academic dishonesty, detection of which will result in an F for the course: |
- copying from other students
- using online solution banks, websites, message boards, etc
- asking anyone, anywhere, via any medium to help you with any part of the exam

During the exam times, Prof. Ursell will be available via Zoom for questions.

### Assignment Scheduling & Late Assignments
- There will be no deadlines on pre-lecture assignments, though their utility is highest if completed before watching the lecture.
- Late homeworks will not be accepted, though we realize that this term is a new situation for all parties, so we will be appropriately flexible – but do not abuse that flexibility.

### Grading
The various grade components and their weight toward the final grade are:
- Homework assignments: 35% (in total)
- Lecture QuickCheck completion: 5%
- Mid-term Exam: 25%
- Final Exam: 25%
- Tutorials: 10%

- Tutorials are scored on attendance / participation, not overall correctness. Students can miss one tutorial and receive full tutorial credit. After the first missed tutorial, each missed tutorial removes 2% of your final grade (there are only 6 tutorials in total).

Prof. Ursell reserves the right to modify this grading scheme as necessary.

### Other Information

### Absences
You are responsible for your success in this course, which means watching lectures, taking notes, and digesting the material. Prof. Ursell and the GTF(s) are here to help you, in class and in tutorial. No attendance will be taken this term due to the extreme circumstances.

### Necessary Caveats
Students are expected to abide by university policies on academic honesty, avoiding plagiarism, fabrication, cheating, and academic misconduct. The Student Conduct Code (http://conduct.uoregon.edu/) provides definitions of these terms and explanations of the university policy on the subject. The UO Library also provides a guide to avoiding plagiarism**. You are responsible for understanding these regulations and abiding by them. Students should be particularly careful to avoid plagiarism in homeworks. Academic dishonesty will be dealt with severely, as it is disrespectful to your fellow students and your instructor, as well as being against both university regulations and state laws. If you are questioning the integrity of what you’re doing, it probably falls under the umbrella of academic dishonesty. If you have questions or concerns, come see me.
If there are aspects of the instruction or course design that result in barriers to your inclusion, please notify Prof. Ursell as soon as possible. You are also welcome to contact Disability Services in 164 Oregon Hall, 541-346-1155.

Plan ahead and start early! The reading assignments are a vital part of this course, and it is important to start reading them early not only to understand the subject matter but also to be able to articulate what you don’t understand – in class lectures and discussions will build on your reading experiences. Note that the reading assignments must be done before the days at which their topics are discussed in lecture. In general, it will be crucial to keep up with the course and not fall behind; later topics will build on earlier ones.

Make use of resources. If you have questions about lectures, assignments, readings, or other matters, please visit Prof. Ursell during tutorial, or communicate by email.

The University’s Tutoring and Academic Engagement Center provides a variety of workshops, individual consultations, writing assistance labs, tutoring, and more to assist UO students; see [http://engage.uoregon.edu/](http://engage.uoregon.edu/).

Mental Health Support Services: Call anytime to speak with a therapist who can provide support and connect you with resources. Located on the 2nd Floor of the Health Center (541)346-3227.