How This Course Works

Ways to Communicate

Our class will primarily communicate through our Canvas site. Announcements are archived there and automatically forwarded to your UO email, and can even reach you by text. Check and adjust your settings under Account > Notifications.

If you need to contact me or another member of our teaching team, you can send us a message on Canvas or an email.

Combination of Group Work and Individual Work

This course involves a significant amount of collaborative group work as well as individual work. You are openly encouraged to work with your peers, however you are required to submit your own work. This is an effort to bring attention to the broad learning goals of group collaboration and group communication—two valuable skills that will readily transfer to any field. Additionally, we need some way to measure your individual contribution to your course grade. In doing so, we hope to provide a relevant and meaningful learning experience.

Lab Meetings (In person)

Lab Meetings occur each week in Room 13 of Willamette Hall at the times listed in the table below.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Day</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>42223</td>
<td>Tuesday and Thursday</td>
<td>1300-1520</td>
</tr>
<tr>
<td>42224</td>
<td>Tuesday and Thursday</td>
<td>1600-1830</td>
</tr>
</tbody>
</table>

In order to pass this course, you must attend and participate in all Lab meetings.

If you are sick please stay home. Let me know through Canvas or email and we will work together to make sure that you can complete the labs while focusing on recovering from your illness.

If you miss a lab due to some other circumstance beyond your control (i.e. an emergency arises), contact the instructor as soon as you are safely able. We may be able to make
arrangements to allow you to complete that day's lab with the other section. Should such an issue arise, please contact Trevor (tbrunnen@uoregon.edu) as soon as possible.

In order to keep apace with the course it may be possible to work through a remote version of the Lab should you not be able to attend either section.

**A Lab Cycle**

Each lab that we do in the course will have the following parts in this order:

**Prelabs** *(Completed Individually)*

Prelabs will be assigned at the beginning of the lab session. It should only take a few minutes and is meant for you to predict what you think will happen during the lab. Wrong answers are expected and okay! Click here for more info on the nature of Prelabs for this course.

**Lab Sheets** *(Completed as a Group)*

Lab sheets are provide to guide you through each of the Lab Activities. Groups should work on these collaboratively, though each student should retain a copy for their own records.

**Annotated Prelabs** *(Completed Individually)*

Prelab annotation involves modifying, correcting, and adding to the original Prelab response to show how your thinking evolved over the course of the Lab. The rubric used for grading is available on each assignment page. These should be completed shortly after the completion of Lab, however we have set the due date to start of the next Lab. Click here for a more detailed description of Annotated Prelabs.

**Follow-up Quizzes** *(Completed Individually)*

Follow-up quizzes quizzes will be posted to Canvas after the conclusion of Labs each Tuesday and Thursday. These will open at 6PM you will have 24 hours to turn in your first attempt. These quizzes are somewhat probing and have been designed to gauge the depth of your conceptual understanding. (Note: Historically these quizzes have been due at 8:59 the next morning to ensure that you attempt them on your own, without being able to discuss the questions with the teaching team. I have moved the due date for these to make sure that you have time to do them without stress. I still expect that you will do these without collaboration with your peer or the teaching team.) Click here for a more detailed description of Follow-up Quizzes.

**How You Are Graded**
The Lab Activities in this course have been designed to engage you an active role in your learning Classical Mechanics. Self-assessment is an important form of internal feedback for this process. We will be aiming to participate in the process of science in order to learn science.

In this course students will:

- Understand the Process of Science.
- Draw meaningful conclusions from observations of the physical world.
- Construct knowledge in a way that does not rely on an outside authority.
- Develop accurate, evidence-based, plain-language explanations for many of the topics and phenomena discussed in the accompanying lecture course.
- Gain experience collecting and analyzing data, with the ability to extract physical quantities from fit parameters used in graphical representations.

We will use a proficiency-based approach to learning in this course. Each item you are assessed on will be assessed as either "met" or "not yet met". (This will likely be notated on your papers as a checkmark and an X) An important part of proficiency-based learning is that, for items you have "not yet met" proficiency on, you will have the ability to continue working to meet proficiency.

You will be assessed on Prelabs, Prelab Annotation, and Follow-up Quizzes. There will be no final exam for this course. Here are the different items that you will be graded on in this course:

**Prelabs**

Individual work. You have "met" the expectations for the Prelab if you have solidly attempted the problems and it is turned in on time.

Because the Prelab is a snapshot of your understanding before the lab, there is not a way to reattempt these.

**Prelab Annotations**

There are several things you need to do to have "met" the expectations for the Prelab Annotations.

1. You have corrected any mistakes in the prelab problems.
2. You have provided detailed feedback to yourself commenting on thoughts from the prelab that you wish to keep and thoughts you wish to let go of. (I suggested using a different color of ink for each of those.)
3. You have provided a narrative about 2 of the Learning Outcomes listed at the top of the lab. This narrative should include:
A. an in-depth understanding of the physics concepts and reasoning needed to meet the Learning Outcomes
B. how your thinking and understanding of the Learning Outcomes changed and evolved

4. You have attached your completed lab sheets

The initial submission of your Prelab Annotations is due at the start of the following lab. We will try to have this submission marked, entered, and returned to you by the end of lab. If you have "not yet met" proficiency for the Prelab Annotation, you can use the feedback provided to update your work and turn it in again. Resubmissions will be marked by me as they come in and returned to you when finished. These may be returned to you during the same lab you turned them in, or in a future lab, depending on when I am able to mark them. There is no strict limit on the number of times you can resubmit a Prelab Annotation, but I encourage you to submit your best work.

Follow-Up Quizzes

You have "met" the expectations for the Follow-Up Quizzes if you have answered all of the (typically 5) questions correctly. You "have not met" expectations if you have not answered all of the questions correctly.

At the beginning of each lab, we will have a class-wide discussion of the previous lab's Follow-Up Quiz. After we have had this discussion, I will reopen the Follow-Up Quiz. You can retake the quiz until you have "met" proficiency.

Final Grade Distribution

You are expected to attend and complete all labs. Your final grade will be determined by the number of each item you have "met" proficiency for. You must meet proficiency for all items to earn that grade. For example, having 7 "met" marks for Prelabs, 7 for Follow-Up Quizzes, and 5 Prelab Annotations would earn a B.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Prelabs</th>
<th>Prelab Annotations</th>
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<tbody>
<tr>
<td>A</td>
<td>6 or 7</td>
<td>6 or 7</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>F</td>
<td>0, 1, 2</td>
<td>0, 1, 2</td>
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</tbody>
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Instructor Contact Information

Dr. Trevor Brunnenmeyer (he/him) (Please feel free to refer to me as "Trevor")

tbrunnen@uoregon.edu

Office Hours

Tuesday and Thursday 9:00 am - 10:00 am in WIL 13 (Our lab room)

If you are unable to make these, have a question that can be answered asynchronously, or would like to meet at a different time, send me an email and we'll work it out. In general my email response time is unhealthily fast unless there is a Ducks game on (which there are very few of during the summer).

Graduate Student Teaching Team

The Graduate Employees (GEs) listed below will be working with you as a part of the PHYS 204 Teaching Team this term:

Kim Nichols knichol2@uoregon.edu

We will also have the assistance of undergraduate Physics Peer Learning Assistants.

Time Commitment

This is a 2-credit course, and according to the University of Oregon' Student Engagement policy, that means you should plan to spend about six hours a week in a ten week course. I would suggest you spend your time in the following way for each lab:

Lab Activity ~2.5 hour
Annotated Prelab ~1.5 hour
Follow-Up Quizzes ~0.5 hours

Academic Integrity

The University Student Conduct Code defines academic misconduct, which includes unauthorized help on assignments and examinations and the use of sources without acknowledgment. Academic misconduct is prohibited at UO. I will report misconduct to
the Office of Student Conduct and Community Standards—consequences can include failure of this course.

If you are worried that something might be academic misconduct, it probably is. If you want to check that worry with me ahead of time, please do. It's a lot easier to clarify something upfront than it is to deal with it after the fact.

On a personal level, please don't cheat or engage in other types of academic misconduct. It's a pain for everyone involved.

A note about ChatGPT or your other favorite Large Language Model (or other AI): These systems are great for their intended purposes, which is predicting the next text after you feed it some text. They aren't good at doing Physics. If you use one of these systems (and particularly if you turn in something generated by one), you'll be engaging in academic misconduct and you'll probably not turn in a correct Physics anyway.

**Academic Disruption**

In the event of a campus emergency that disrupts academic activities, course requirements, deadlines, and grading percentages are subject to change. Information about changes in this course will be communicated as soon as possible by email, and on Canvas. If we are not able to meet face-to-face, students should immediately log onto Canvas and read any announcements and/or access alternative assignments. Students are also expected to continue coursework as outlined in this syllabus or other instructions on Canvas.

In the event that the instructor of this course has to quarantine, this course may be taught online during that time.

**UO Student Resources**

**Accessible Education Center**

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 360 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

**Your Well-being**

Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help
navigating challenges in their life. If you're facing such challenges, you don't need to handle them on your own--there's help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.

University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates. Find out more at health.uoregon.edu/ducknest.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Center for Multicultural Academic Excellence

The Center for Multicultural Academic Excellence specializes in providing a culturally supportive environment that empowers self-identified students of color to fulfill their educational and career goals.

Office of Academic Advising

The Office of Academic Advising guides UO students in pursuing their academic goals. And you'll see the beautiful new Tykeson building between Chapman and Johnson halls—this will be the new site of pre-major advising and the Career Center; its services are clustered around compelling areas called “Flight Paths” that helps students identify interests that span majors and are linked to co-curricular and career-readiness opportunities.

Tutoring and Academic Engagement Center

The Tutoring and Academic Engagement Center offers tutoring and other opportunities to help students succeed.

Office of the Dean of Students
The Office of the Dean of Students assists students who are struggling with any crisis impacting their academics by offering resources, support, referral, and case management to overcome these barriers.