

Physics 212 Introductory Message

Welcome to Physics 212!

We hope you had a fantastic winter break, and are ready for a great semester!

This course has several components, and even requires you to do some work **before** the first lecture, so we wanted to give you a heads up via email.

Everything you need to know about the course can be found at our course website:

<http://courses.physics.illinois.edu/phys212/>

The “Schedule” link is very helpful, showing all of the course activities and when they are due. When in doubt, check this link.

Note that you may have lab or discussion before your first lecture – they start the first week of class!

Discussions Sections: We will begin Tuesday Jan 16. We will provide the discussion material for each week on the website on the Schedule page. More information about discussion sections will be disseminated by your discussion TA at the first meeting of your section, the first week of class.

Lecture begins Tuesday Jan 16. To make the best use of our lecture time, we ask you to prepare by completing a prelecture and checkpoint before lecture. These are delivered via <https://smart.physics.illinois.edu/>. You should automatically have access using your University credentials. **Please complete the first pre-lecture and checkpoint activities before 8:00 AM on Tuesday.** We will be using physical iclickers (NOT the phone app), so be sure to get one by Jan 16 and bring it to lecture (note: you will not be able to register it, in SmartPhysics until AFTER you use it once; you can find out more here: <https://courses.physics.illinois.edu/phys211/sp2024/smarticlickerregistration.pdf>). We request that you keep your cell phones put away (and ‘off’ or on ‘silent’) for lecture as they interfere with your own and others’ learning.

Lab Sections: Labs will also begin Tuesday Jan 16. To make the best use of our lab time, **you must complete Prelab 1 before attending Lab 1.** The pre-lab and lab instructions are delivered via <https://smart.physics.illinois.edu>. We will use the IOLab and E&M Accessory kit for lab sections this semester. Instructions for obtaining these materials are available in smart.physics and on the course website. You will not need an IOLab for Lab 1. That's it for now.

We look forward to seeing you in lecture on Tuesday! It is likely to be a Full House -- get there early if you want good seats!

Paul Kwiat (2 and 3 pm) and Elena Koptieva (4 pm)
(Your Physics 212 lecturers)

PS As you'll see, there are many aspects to 212, and it can at times seem a little overwhelming. In the past we asked the students what piece of advice they would give to new students, in order to do well in P212 and to maximally enjoy it.

Below is a (greatly reduced) list that includes the main sentiments. Please take two minutes to read through it, and seriously think about following your predecessors' advice. Two main points: Don't fall behind, and get help early.

If you thought 211 was easy, good for you, cause 212 isn't.

Keep up. Study, STUDY STUDY STUDY!

Do all the work yourself or you will never understand it. Go to office hours copiously. They REALLY help.

Work in small groups — 3-4 people — to learn from each other.

Make sure you connect with your profs. and TAs, if you feel lost or can't figure things out they are more than willing to help. But, you need to feel comfortable going to them. Get help early. Stay on top of the material. Everything builds off of previous topics so if something doesn't exactly make sense make sure you get it clarified before it becomes a burden. Do not fall behind! It is extremely difficult to catch up.

If you keep up with things, you will be fine. Well, maybe not fine, but you will do better than I did. It is a lot...seriously a lot of material... Make sure you get help on any concepts that you don't understand as soon as they occur. Don't wait till the day before the test to get help.

Do the Prelectures earlier than midnight the night before. Ask for the Maxwell's equation song!

Find someone to study with; and study for tests early! Work with friends on homework and test practice. It's the best way to learn.

You can do it. Just stick with it and don't fall behind.

GO TO LECTURE...AND ACTUALLY PAY ATTENTION -- it helps! Ask more questions.

Lectures really do help make all the homework, quizzes, labs, etc. come together (and you get to see cool demos!)

Take the prelectures seriously, actually try on them. I tried really hard on all but a few, and it helps out in lecture the next day.

Don't assume that you can understand all of the material if you do not go to lecture consistently... my biggest mistake.

JESUS GO TO LECTURE!!

Go to discussion, it is the most helpful part of the course.

Lecture is nice but most if not all of your learning will happen at discussion. The discussions are ABSOLUTELY NECESSARY for learning how to actually do the problems

Do the homework to actually *understand* the material, not just to get it done. When solving a tough problem don't panic, use common sense. Keep up with the HW, because trying to learn topics right before the test is hard.

Do all the homework yourself, and make sure to do at least one practice exam before the test.

Practice exams are your friend.

Go to the review and problem solving sessions. Do as many practice exams as you can before a real exam. Nothing else really prepares you.

Study multiple days in advance in order to cover all the info for the test. Don't cram.

Beware of professors wearing bowties!

Buckle your seatbelt Dorothy, cause Kansas is going bye-bye.