

So you want to take a readings course...

This is what you should know...

What is a readings course about?

The point of a readings course is to give you the opportunity to delve more deeply into a topic of particular interest to you. Some examples include “the physics of music”, “the physics of energy” or “the physics of football”.

What happens in a readings course?

- 1-3 credit hours at the 2000-level (phys2830 or astr2830, requiring essentially no pre-requisite knowledge) or 4000-level (phys4830 or astr4830, requiring *at least* 2220-level working knowledge)
- As with your other courses, expect to spend 3-4 hours per week for each credit hour (so a 3 credit hour readings course will take 9-12 hours of your time each week.)
- Often, you will have weekly meetings with your professor throughout the semester.
- You will be expected to read and analyze primary and secondary sources and produce a product (seminar talk or paper, for example) that shows mastery of the topic at hand. This product will focus on the work other people have done, not work that you have done.
- You will receive a grade for this course based upon your performance.

How can I prepare for a readings course?

1. Before you approach a professor, think of a topic that YOU would like to know more about. Write it down, along with some questions that come to mind.
2. Perform a preliminary search for resources (books, journals, magazines) on the internet or in the library, and make a brief list of resources that seem like they might be valuable.
3. Consider carefully how much time you will be able to dedicate to the course.
4. Survey professor websites and ask around to find a professor who might have a compatible interest.
5. Make an appointment to speak with that professor. Let them know in advance the topic that you are thinking of investigating, so they can think about approaches.
6. Pick up the necessary enrollment form from Nereyda.
7. Meet with the professor. Bring to the meeting:
 - a. The form.
 - b. Your topic and questions
 - c. Your preliminary research list
8. You and the professor will develop a readings plan, defining “assignments”, the final product and any intermediate deadlines that need to be met.

So you want to take a research course...

This is what you should know...

What is a research course about?

The point of a research course is to give you experience in carrying out research, which can come in several varieties. It might be engineering-oriented (crafting an instrument). It might be computation oriented (creating a simulation or computer code). It might be pure science oriented (making measurements, collecting data or running simulations). Or it might be something entirely different. Research courses are different than readings courses because the final product will focus on what you have done, rather than what others have done. Still, there is an expectation that you will become familiar with the work of others in the field of study.

What happens in a research course?

- 1-3 credit hours at the 2000-level (phys2800 or astr2800, requiring essentially no pre-requisite knowledge) or 4000-level (phys4800 or astr4800, requiring *at least* 2220-level working knowledge)
- As with your other courses, expect to spend 3-4 hours per week for each credit hour (so a 3 credit hour readings course will take 9-12 hours of your time each week.)
- Often, you will have weekly meetings with your professor throughout the semester.
- You will be expected to perform original work and produce a product each semester (functioning instrumentation, seminar talk or paper, for example) that demonstrates your work.
- You will receive a grade for this course based upon your performance.

How can I prepare for a research course?

1. Before you approach a professor, peruse the hallway posters, professor websites and ask around to find out what projects professors are working on. While it is not required that you fit into an ongoing project, this overview will help you find someone whose interests align with yours.
2. Consider carefully how much time you will be able to dedicate to the course.
3. Make an appointment for a fact-finding interview with a professor. Bring either a list of questions you may have about the research already underway, or a concept for research you might like to do.
4. At the meeting, you and the professor will likely come up with several ideas for projects. Make another appointment to meet again in a few days.
5. Do some more reading about the topics from the meeting (4).
6. Meet again to narrow down the topic on which you will do research, define expectations, grading criteria, set a meeting schedule and set the project goals.