

Syllabus

ASTR 421 - Stellar Observations and Theory

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Class time/place: Mondays & Wednesdays, 12:30-1:50. PAA 210 / Zoom
Zoom links will be emailed to the course email list. You are expected to check your emails!

Course Goals

The title of the course is “Stellar Observations and Theory”, which is comically broad. We will focus on modern observations of stars and the theoretical constraints they place on our understanding of stellar formation, composition, and evolution. The course is heavily focused coding and data analysis, with the goal of exposing students to modern and relevant types of stellar astronomy data and models. If there are questions or topics you would *like* us to focus more on, by all means let us know!

Code of Conduct

We all agree to abide by the relevant codes of conduct for UW, including those regarding academic misconduct and personal behavior. All cases of suspected academic misconduct will be reported to the Dean’s office. Absolutely no harassing or disruptive behavior will be tolerated, either in-person or online. If you experience anything untoward during the course, by any classmate or the instruction team, please report it promptly to the professor or the Astronomy Department’s academic coordinator.

Covid-19 Considerations

Goal: No-one shall be punished for doing what is needed to survive the pandemic while participating in this course. (This goes for both the students & instruction team). We are still in the midst of a pandemic. You (or people who depend on you) may get sick. Your instructors or their dependents may get sick. We shall all show grace and compassion wherever possible.

Currently (as of 27 Dec 2021) we are scheduled to be online “for week-1 of Winter 2022 only”... This situation is likely to evolve rapidly, and the past 2 years have taught us to not assume anything. We will hold class for week 1 via Zoom. If in-person instruction resumes, we will be in PAA210 as scheduled, with a Zoom link available for anyone not able to attend. However, due to my own life situation I am very cautious about in-person interactions in general, and we may decide to voluntarily maintain Zoom class. Please be honest and considerate about where your comfort level is, and I will do the same.

Everyone will be required to adhere to UW mask-wearing guidelines when in-person.

Course Evaluation

Weekly Q/A Participation: 10% Homeworks: 70% Final Project: 20%

The official policy is: **No late work is accepted.** Assignments are due via Dropbox Upload links, which close at the stated time. However, we are still in a pandemic, you are all adults, and life happens. I will grant occasional extensions on a case-by-case basis for reasonable extenuating circumstances. Just reach out and communicate, the earlier the better.

There is no extra credit available.

I will strive to get lectures posted 1 week before the related class. You are expected to watch the lecture *before* the scheduled class time. A delayed lecture will result in forgiveness of the day's Question submission. **Each day of lecture (by 9AM) you are required to submit a question you had from the lecture or homework.** We will use our class time together to answer the top questions, discuss assignments, or go over some coding demos/tutorials that may help with homework. You are *strongly* encouraged to attend all classes, and any unused class time will be returned to you.

[Lecture Q/A Submission Form](#)

Group work is encouraged! The homework may be challenging to many of you, and in real academic research we rarely work alone. Therefore you are encouraged to form homework alliances (even one class-wide super-team if you wish), and work on assignments together. *However*, **A) you must include written acknowledgment of your collaborators with each assignment** (hint: make sure partners are acknowledging each other, or there will be questions about the nature of the "collaboration"), and **B) every student must turn in unique homework** with their own code/results/answers/text.

In general: solve the problems together, do the write-ups yourself!