Stellar Populations

Graduate Seminar AY250 | Spring 2026

Instructor: Dan Weisz

Course Logistics

- **Instructor:** Dan Weisz

  dan.weisz@berkeley.edu

- **Lectures:**

  Tuesday & Thursday

  9:40 - 11:00 am

- **Location:**

  501b Campbell Hall

- **Office Hours:**

  Email to schedule or ask to chat

Campbell Hall

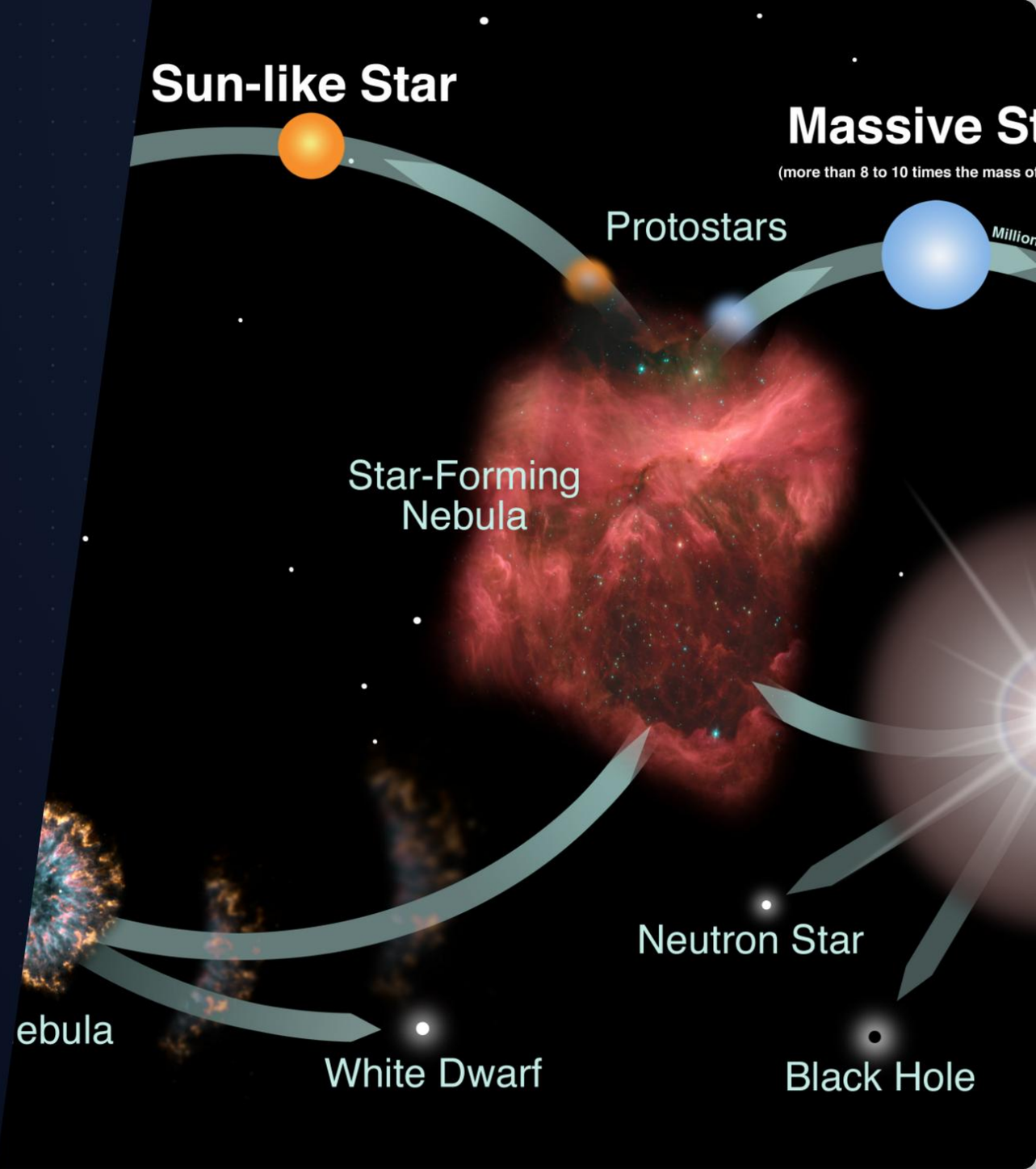
Course Overview

⭐ The "Ingredients"

Dive into the components of stellar populations: the Stellar IMF, stellar evolution, dust, star formation histories, and chemical evolution.

🤖 AI Integration

We will explore these topics using AI assistants to review basics, summarize papers, and efficiently code up models (e.g., Galaxy SED fitters).



Class Format

Discussion

Background lectures mixed with group discussions. Formal "lectures" are minimal.

Coding & AI

Most classwork is done during lecture time, utilizing AI tools to enhance productivity.

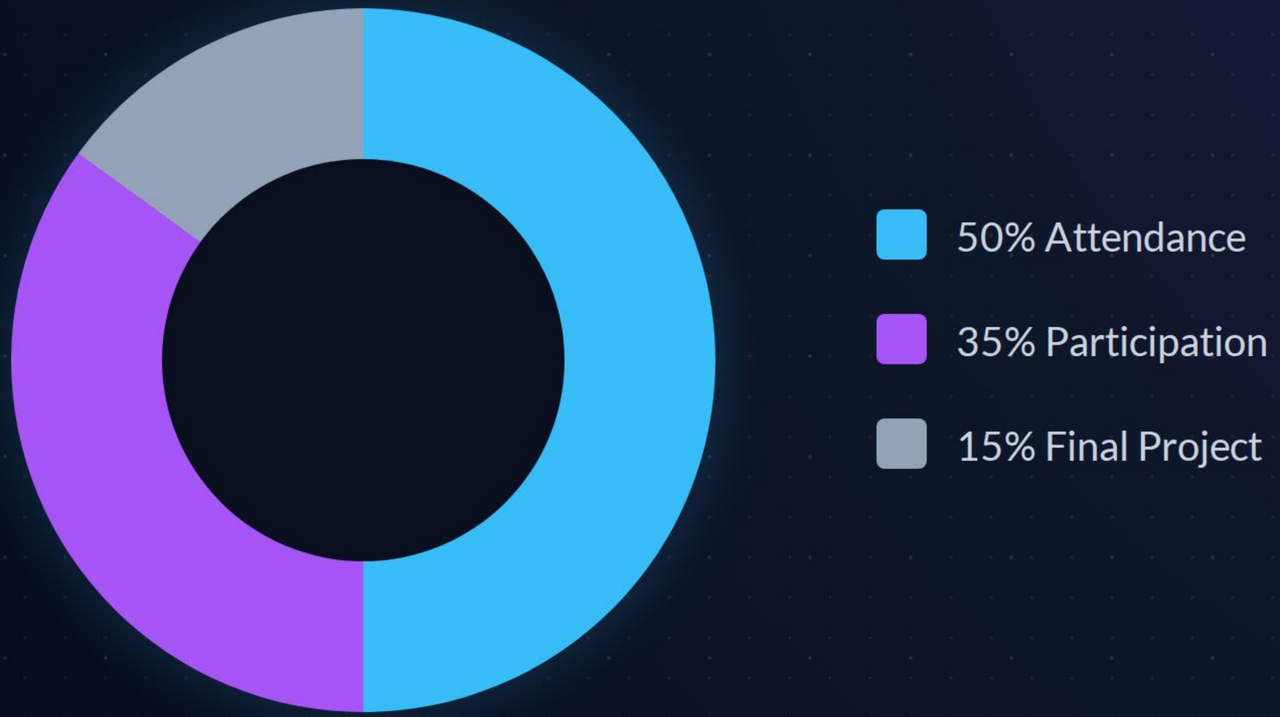
Readings

Take-home reading assignments and leading discussions on relevant astrophysics papers.

What You Need

- **Laptop:** Required for in-class coding and AI-based research.
- **GitHub Repo:** A repository to store all your code for this class.
- **Virtual Notebook:** (e.g., Google Doc) To keep running notes throughout the semester.
- **AI Assistant:** Access to Gemini, ChatGPT, or similar. You must log/note which tools you use.

Grading Breakdown



Emphasis is placed on being present and actively engaging with the material.

Attendance Policy

Mandatory In-Person

Attendance is essential. You must physically sign in at each lecture to receive credit.

Absences

- **Excused:** Work/Academic trips with advance notice do not count against you.
- **Unexcused:** You get **two** "free" unexcused absences (illness, emergency).
- **Penalty:** Additional unexcused absences result in a zero for that day.

Participation & Engagement

Active Engagement

Contributing to discussions, asking questions, and maintaining your notebook are key.

Leading Discussion

You will sign up to lead paper discussions and present slides regularly.

> **No Distractions:** Please do not work on other research, email, or check phones during class.

Final Project Timeline

Topic of choice broadly related to stellar populations.

Now

Start thinking of topics

Late March

Project Approval
(Around Spring Break)

Late April

Final Presentation
(End of Semester)

Important Dates (No Lecture)

Jan 29

Thursday

No Class

Feb 17

Tuesday

(Uncertain)

Late March / Early April

Instructor away for UVEX review