



Welcome!

Welcome to Astr507 Galactic Archaeology (Sp2026)!

Meetings are Wednesdays 10 am - 1 pm

Classes are in person, but to share materials we will also use a Zoom link

Description:

In this course we will discuss the field of Galactic Archaeology, with a focus on stellar chemical and dynamical analyses in the Milky Way and Local Group galaxies. The course starts with lectures on background material, methods, key review papers, and open questions. We will discuss how studying stars helps us to understand galaxy formation and evolution in a cosmological framework. The lectures will also include guest presentations, demonstrations, and hands-on exercises.

Grading Scheme:

Small assignments (7-8)	65% (5-10% each)
Individual research project	25%
Class participation	10%

Learning Outcomes:

At the end of the course, students will be able to:

1. describe how studying stars helps us to understand galaxy formation and evolution in general, in the Milky Way, and in the Local Group.
2. describe how positions, distances, velocities, metallicities, chemical abundances, and ages are measured for different stellar populations, and discuss limitations in the methods.
3. discuss the role of simulations and models in furthering our understanding of the Milky Way and Local Group.
4. summarize a picture of the Milky Way and Local Group, the main components, their formation history, and interactions.
5. critically discuss and assess recent research in Galactic Archaeology.