AST501 Stellar Interiors and Evolution
Course outline Fall Term 2024
Calendar entry: The physics of stars and stellar explosions. Interior structure and evolution including the origin of the elements. Stellar properties as a function of mass and metallicity. Computational simulations of stars and stellar physics processes, such as mixing, and

Nuclear energy generation and the formation of the elements, neutron-capture nucleosynthesis to create heavy elements, the s, i and r process	
• Supernova	
Binary stars	
Asteroseismology and stellar pulsation	
Emphasis will be guided by student interest.	
n addition to the physics of stars and the specific stellar phenomena and evolution phases the course will familiarize students with several of the research tools astronomers often use.	