ASTR. 403/Phys. 402 – "Stars" Syllabus Spring 2017

Instructors: Bruce Draine [BTD], Adam Burrows [AB]

H ≡ homework due

Date	Lecturer	Topic
Feb. 6– **March** 15	BTD	The Interstellar Medium and Star Formation
March 15, Wednesday		**MID-TERM EXAM**
March 18-26		***Spring Recess***
27	AB	Stellar Timescales and Basics
29	AB	Equations of Stellar Structure and the Virial Theorem
Apr. 3	AB	Microphysics: Equation of State, Opacities
5 **H**	AB	Radiative Transfer, and Convection
10	AB	Scaling Relations and Polytropes
12 **H**	AB	Nuclear Masses, Fusion Reactions, and Energetics
17	AB	Hayashi Track, Ignition Mass, and Schönberg-Chandrasekhar Limit
19 **H**	AB	Shell Burning
24	AB	Stages of Stellar Evolution
26 **H**	AB	Nucleosynthesis
May 1	AB	Stellar Endpoints: White Dwarfs, Neutron Stars, and Black Holes
3	AB	Supernova Explosions
May 8-16		—**Reading Period**—
17, Wednesday		**FINAL EXAM**