

Astro I

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1 Guidelines and Outline

The course is intended to provide students with a broad overview of the constituents of the observable universe, with a sense of what the main achievements of astrophysics are, and with a sense of what the main current open questions are. The course is not intended to be comprehensive in the range of topics covered, or exhaustive in the discussion of particular topics. Rather, following a broad phenomenological overview we will focus on several subjects for which a rigorous yet simple discussion of key achievements and questions is possible.

Few observational features that can be rigorously and simply explained are preferable to broad story telling. However, some of the latter is unfortunately unavoidable. We will try to make a clear distinction between the two.

Content:

1. Overview: The content of the observable universe, Experimental techniques.
2. Stellar structure, evolution and end states.
3. Cosmology.
4. Spectacular explosions.
5. Overview: Main topics of current research.