ASTR 320 Astronomical Spectroscopy

ASTR 320 is an introduction to astronomical spectroscopy. In this course, students will learn the different characteristics of spectra produced by a variety of astronomical sources (stars, nebulae, galaxies), and what kind of information can be extracted from them. They will be exposed to the theory of atomic and molecular energy levels, and will understand the formation of absorption and emission lines in widely different physical conditions. A good understanding of these topics will allow the student to fully appreciate the array of observational techniques regularly used in collecting the empirical knowledge that allows us to build and test astrophysical theories.