

## ASTRONOMY

### AST 131 SOLAR SYSTEM ASTRONOMY

3 Lecture 2 Lab 4 Credit Hours(s)

A survey of the solar system, including the earth-moon system, the planets and their satellites, asteroids, meteors, comets, and the nearest star, our sun. Study ranges from a historical view of the universe to our modern day view of the planetary system as provided by optical and radio telescopes, spectrographic study and space exploration. Among topics to be considered are the nature of light and telescopes, planetary surfaces and atmospheres, the origin of the solar system and extraterrestrial life. Laboratory work is supplemented by field trips and celestial observations with the unaided eye and telescopes.

### AST 132 ASTRONOMY OF STARS & GALAXIES

3 Lecture 2 Lab 4 Credit Hours(s)

This course is a study of the universe beyond the solar system. The course begins by developing the theory of stellar evolution from observations and physical principles and discussing the formation of stars, supernovae, pulsars, black holes, etc. The course then proceeds to examine interstellar matter and to deal with the evolution of galaxies. Finally, the course deals with the origins of the universe itself and examines the various scenarios about the future of the universe.

### AST 271 SPECIAL STUDY PROJECT I

1 Lecture 0 Lab 1 Credit Hours(s)

A special learning experience designed by one or more students with the cooperation and approval of a faculty member. Proposed study plans require departmental approval. Projects may be based on reading, research, community service, work experience, or other activities that advance the student's knowledge and competence in the field of astronomy or related areas. The student's time commitment to the project will be approximately 35-50 hours.

### AST 272 SPECIAL STUDY PROJECT II

2 Lecture 0 Lab 2 Credit Hours(s)

Similar to AST 271, except that the student's time commitment to the project will be approximately 70-90 hours.

### AST 273 SPECIAL STUDY PROJECT III

3 Lecture 0 Lab 3 Credit Hours(s)

Similar to AST 271, except that the student's time commitment to the project will be approximately 105-135 hours.