ASTRONOMY (AST)

AST 100 - Observational Astronomy
Credit Hours: 2, **Contact Hours: 2**
Division: Science Math
This course is an introduction to astronomy. The goal of this course is to acquaint the student with the constellations, solar system objects and their motions, the celestial sphere concept and co-ordinate system. Stars, star clusters, nebulae and galaxies are also studied. Students will use naked-eye observations as well as telescopes, spectrograph, photometer and CCD camera to observe and report findings. Each session includes training in the operation of astronomical equipment. Group 2 course.
Recommended Prerequisite(s): ENG 111, MTH 100

AST 109 - Planetary Astronomy
Credit Hours: 4, **Contact Hours: 5**
Division: Science Math
Characteristics and properties of the solar system and its components are presented to students in the context of the history of discovery. This information is integrated with student observational data to develop a mathematical model in the laboratory. The model is developed by incorporating equations used to compute characteristics and properties of solar system components. The model is utilized by students to encourage understanding of why the solar system has evolved to its current state by evaluating the effects of changes in values of fundamental measured properties and characteristics. Group 1 lab course. Group 1 course. Critical Thinking - Direct.
Required Prerequisite(s): MTH 111; ENG 11/111 or ENG 111 may be taken concurrently

Corequisites: AST 109L

AST 109L - Planetary Astronomy Lab
Credit Hours: 0, **Contact Hours: 0**
Division: Science Math
See AST 109 for course description.
Corequisites: AST 109

AST 119 - Astronomy
Credit Hours: 4, **Contact Hours: 5**
Division: Science Math
History of discovery of the nature of the cosmos and its contents is the format utilized to develop understanding of the nature of stars and the universe, and the physical principles determining this nature. These principles underlie our proficiency for prediction of the nature of the universe and our ability to make observations of our universe. The principles are analyzed by means of a student developed mathematical model incorporating the quantitative relationships derived by physicists and astronomers. Observations provide students with the sky knowledge and data necessary for prediction of stellar characteristics. Group 1 lab course. Group 1 course. Critical Thinking - Direct.
Required Prerequisite(s): MTH 111; ENG 11/111 or ENG 111 may be taken concurrently

Corequisites: AST 119L

AST 119L - Astronomy Lab
Credit Hours: 0, **Contact Hours: 0**
Division: Science Math
See AST 119 for course description.
Corequisites: AST 119