

ATR - ASTRONOMY

ATR 115 **3 credit hours (lecture: 3 | lab: 0)**

Descriptive Astronomy

Course introduces astronomy. Content includes historical development of astronomy, solar system and planetary motion, physics of motion, electromagnetic radiation and astronomical instruments, stars and stellar evolution, galaxies, the big bang, and cosmology. Credit toward graduation cannot be received in both ATR 115 (formerly PHY 115) and ATR 120 (formerly PHY 120).

Recommended: MAT 070 or higher.

IAI General Education: P1 906

Instruction Type: In-Person | Online | Hybrid

Term Typically Offered: Fall | Spring | Summer

ATR 120 **4 credit hours (lecture: 3 | lab: 3)**

Practical Astronomy

Course introduces astronomy. Content includes historical development of astronomy, solar system and planetary motion, physics of motion, electromagnetic radiation and astronomical instruments, stars and stellar evolution, galaxies, the big bang, and cosmology. Laboratory activities include operation of telescopes, observation of solar system and deep sky objects, sky charts, and use of computer-based planetarium software. Credit toward graduation cannot be received in both ATR 120 (formerly PHY 120) and ATR 115 (formerly PHY 115).

Prerequisite: MAT 070 with grade of P.

IAI General Education: P1 906L

Instruction Type: In-Person | Hybrid

Fee: \$30