# Augustana College

# **Astronomy**

Courses required for the first year: None

Courses recommended for the first year:

Fall – MATH-160\* or MATH-140, according to placement Spring - PHYS-211, MATH-160\* if not taken in fall

**Contact:** 

Dr. Lee Carkner (leecarkner@augustana.edu) or Dr. William Peterson (williampeterson@augustana.edu)

### **The Minor in Astronomy**

#### **Required Courses**

Course Number	Course Name	Learning Perspective/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
ASTR-135	Planets	PN		F	4
ASTR-145	Stars and Galaxies	PN		SP	4
ASTR-305	Advanced Astronomy		PHYS-151 or PHYS-211, and ASTR-145	F	4
ASTR-367	Astronomical Laboratory		PHYS-151 or PHYS-211	SP	2

# **Additional Courses (\* Required Supporting Courses)**

Course Number	Course Name	Learning Perspective/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
MATH-160 (see Note below)	Calculus			F/SP	4
PHYS-211**	Foundational Physics I	PN	MATH-160 (or co-requisite)	SP	4
PHYS-151**	Principles of Physics I	PN		F	4

Note: MATH-160 is only necessary for taking PHYS-211

# **Minor Overview**

• ASTR-135 and ASTR-145 are taught in the John Deere Planetarium and include full-dome content on constellations, visual astronomy, and navigation using the digital projector and starfield. Students will also have opportunities to help with open houses by giving planetarium shows and

<sup>\*\*</sup>PHYS-211 or PHYS-151 is required

- operating telescopes.
- Students will use the remotely operated Robert L. Mutel Telescope, provided by the MACRO consortium, to collect astronomical images and data for assignments and lab activities in the courses related to this minor.
- Interested students will have the opportunity to do research with the telescope and/or related
  engineering projects, possibly in collaboration with students and faculty at other schools in the
  MACRO consortium, and join faculty on yearly visits to the observatory site for maintenance,
  upgrades, and experiments.

\*Fall, J term, Spring, Summer; see Academic Calendar for specific dates

Updated April 2025