

**Astrophysics BS**  
**2016-2017 Student Learning Outcomes**

<b>Outcome</b>	<b>Assessment Methods</b>
1 <i>Students will demonstrate basic conceptual understanding of celestial coordinates, Kepler's laws, and stellar properties.</i>	<i>Midterm exam Final exam</i>
2 <i>Students will apply their numerical and computational skills to solve complex problems involving, for example, phase diagrams in thermal physics, celestial mechanics, interior stellar structure, Galactic evolution, and black holes.</i>	<i>Homework assignments/projects Final exam</i>
3 <i>Students will perform an advanced experimental project and data analysis, including distinguishing statistical and systematic errors, propagating errors, and representing data graphically.</i>	<i>Final project Oral presentation of project</i>
4 <i>Students will successfully pursue graduate education after completing BS in Astrophysics.</i>	<i>Exit survey Exit interview</i>
5 <i>Students will demonstrate a basic understanding of the research process.</i>	<i>Research proposal Homework assignment</i>
6 <i>Students will apply modern techniques and methodologies to collect/produce data as well as to analyze and interpret it.</i>	<i>Research report Survey</i>
7 <i>Students will demonstrate the ability to communicate their research findings to the department.</i>	<i>Research report Oral presentation of research</i>