

# ASTRONOMY, B.S.

## Requirements for a Major in Astronomy

Code	Title	Hours
Forty-three semester hours including:		
<b>Required Courses</b>		
PHY 1420	General Physics I	4
PHY 1430	General Physics II	4
PHY 2190	Introduction to Research in Physics	1
PHY 2350	Modern Physics	3
PHY 2360	Mathematical and Computational Physics	3
PHY 2455	Foundations of Astronomy	4
PHY 3320	Intermediate Classical Mechanics	3
PHY 3350	Topics in Astronomy	3
PHY 3455	Observational Astronomy	4
PHY 4150	Instructional Observing	1
PHY 4190	Dissemination of Research Results in Physics	1
PHY 4350	Introduction to Stellar Structure and Evolution	3
PHY 4351	Introduction to Modern Cosmology	3
PHY 4001	Exit Exam	0
Six semester hours of 3000-4000 level PHY courses <sup>1</sup>		6
<b>Subtotal</b>		<b>43</b>
<b>Required Courses in Other Fields</b>		
CHE 1301	Basic Principles of Modern Chemistry I	3
CSI 1430	Introduction to Computer Science I with Laboratory	4
MTH 1321	Calculus I	3
MTH 1322	Calculus II	3
MTH 2311	Linear Algebra	3
MTH 2321	Calculus III	3
MTH 3325	Ordinary Differential Equations	3
MTH 3326	Partial Differential Equations	3
Nine semester hours from the following: BIO, CHE, CSI, GEO, MTH, or STA. <sup>2, 3</sup>		9
<b>Total Hours</b>		<b>77</b>

<sup>1</sup> For students wishing to pursue graduate studies in astronomy, PHY 3330 Intermediate Electricity and Magnetism and PHY 3372 Introductory Quantum Mechanics I are recommended. PHY 3373 Introductory Quantum Mechanics II is also recommended taken as an additional elective course.

<sup>2</sup> Excluding STA 2381 Introductory Statistical Methods

<sup>3</sup> Courses selected must apply to a major in these fields.