

# ASTRONOMY (BS)

## Guidelines for Acceptance to a Physics & Astronomy Department Major

In order to ensure that students are on a successful academic trajectory, it is recommended that students who have not earned at least a C average in both Classical Physics I and II should not declare a major in the Physics & Astronomy Department. Students who have not achieved this minimum grade guideline but who still seek acceptance to a major in one of the programs in the Physics & Astronomy Department must meet with and receive approval from the Department Chair.

## Program Requirements

Code	Title	Hours
<b>Requirements</b>		
ASTR-1300	Sun & Solar System	4
ASTR-1400	Stars & Stellar Systems	4
ASTR-3000	Observational Astronomy	3
ASTR-4100	Introduction to Astrophysics	3
ASTR-4200	Solar System Astrophysics	3
ASTR-4300	Galaxies & Cosmology	3
PHYS-2100 & PHYS-2101	Classical Physics I and Classical Physics I Lab	4
PHYS-2110 & PHYS-2111	Classical Physics II and Classical Physics II Lab	4
PHYS-3200	Relativity & Atomic Physics	3
PHYS-3201	Modern Physics Lab	1
PHYS-3210	Nuclear & Elementary Particle Physics	2
PHYS-3211	Modern Physics Lab II	1
PHYS-4100	Mechanics I	3
PHYS-4110	Mechanics II	3
PHYS-4600	Electricity & Magnetism I	3
PHYS-4610	Electricity & Magnetism II	3
PHYS-4800	Quantum Mechanics	3
PHYS-4400	Thermodynamics	3
PHYS-4300	Optics	3
PHYS-4301	Optics Laboratory	1
ASTR-COMP	Senior Comprehensive Exam	0
PHYS-4910	Physics & Astronomy Research	1
Four semesters of PHYS-4900–PHYS-4903, Physics Colloquium		0
<b>Required Supporting Courses</b>		
CHEM-1200	General Chemistry I Lecture	3
CHEM-1210	General Chemistry II Lecture	3
CHEM-1201	General Chemistry I Laboratory	1
CHEM-1211	General Chemistry II Lab	1
Select one of the following:		2-4
CSCI-2300	Programming for Scientists & Engineers	
CSCI-1140	Introduction to Computer Science I	
ENGR-2000	Computer Applications in Engineering	
MATH-1300	Calculus I	4
MATH-1350	Calculus II	4
MATH-2300	Calculus III	4
MATH-3100	Differential Equations	3

### Recommended Supporting Courses

MATH-2500	Linear Algebra
MATH-2550	Discrete Mathematical Structures I
MATH-3200	Probability & Statistics
MATH-3300	Numerical Computation
<b>Total Hours</b>	<b>83-85</b>