Sample schedule for BS in physics (astrophysics concentration) starting with Calc II

This sample schedule is for the case that fall of year 1 is an odd year. (This distinction is necessary because some of the upper-level astronomy courses are offered every other year.)

Number of credits in parentheses.

Courses designated “Elective” are entirely at the student's discretion.

Two courses from ASTR 403, 404, 420, 480 are required. This sample schedules uses ASTR 404 and (420 or 480). There are other options, including taking both ASTR 420 and 480 in spring of year 3.

Students who complete a second major may omit either PHYS 306 or 428 and need only take one course from ASTR 403, 404, 420, 480.

Fall of Year 1 (14)

MATH 114	(4)	Calculus II
PHYS 160	(3)	Physics I
PHYS 161	(1)	Physics I lab
ENGH 101	(3)	Composition
Mason Core	(3)	

Spring of Year 1 (14)

ASTR 124	(1)	Introduction to Observational Astronomy
ASTR 210	(3)	Introduction to Astrophysics
MATH 213	(3)	Calculus III
PHYS 251	(3)	Intro to Computer Techniques in Physics (satisfies Mason Core IT)
PHYS 260	(3)	Physics II
PHYS 261	(1)	Physics II lab

Fall of Year 2 (15)

ASTR 328	(3)	Stars
MATH 214	(3)	Differential Equations
PHYS 311	(3)	Instrumentation
Mason Core	(3)	
Mason Core	(3)	

Spring of Year 2 (15)

ASTR 404	(3)	Galaxies and Cosmology
PHYS 307	(3)	Thermal Physics
PHYS 308	(3)	Modern Physics
PHYS 312	(3)	Waves and Optics
Mason Core	(3)	

Fall of Year 3 (15)

ASTR 401	(3)	Computer Simulation in Astronomy
PHYS 301	(3)	Analytical Methods of Physics
PHYS 303	(3)	Classical Mechanics
PHYS 305	(3)	Electromagnetic Theory
Mason Core	(3)	

Spring of Year 3 (15)

ASTR 420 or 480	(3)	Exoplanets or The Interstellar Medium
PHYS 306	(3)	Wave Motion and Electromagnetic Radiation
PHYS 402	(3)	Introduction to Quantum Mechanics and Atomic Physics
ENGH 302	(3)	Advanced Composition
Mason Core	(3)	

Fall of Year 4 (17)

ASTR 402	(4)	Methods of Observational Astronomy
ASTR 408	(3)	Senior Research
PHYS 416	(1)	Special Topics in Modern Physics
Elective	(3)	
Elective	(3)	
Elective	(3)	

Spring of Year 4 (15)

PHYS 428	(3)	Relativity
Elective	(3)	
Elective	(3)	
Elective	(3)	
Elective	(3)	