

B.S. Astrophysics 2-year Roadmap

Odd Year Start

YEAR 1	PHYS 325 - Introduction To Mathematical Physics	3	PHYS 340 - Light and Optics (met-in-major Upper Div GE Area 5)	3
	PHYS 381 - Computer Applications for Scientists	2	PHYS 460 - Quantum Physics	3
	PHYS 314 - Introduction to Physics III	4	ASTR 380 - Astrophysics: Stars	3
	ASTR 100 - Descriptive Astronomy	3	American Institutions	6
	University Electives	3		
	TOTAL UNITS	15	TOTAL UNITS	15
YEAR 2	PHYS 320 - Analytical Mechanics	3	PHYS 450 - Statistical Physics	2
	PHYS 491 - Capstone	1	ASTR 331 - Astronomical Imaging	3
	Upper Div GE Area 3 and 4	6	PHYS 430 - Electricity and Magnetism	3
	University Electives	5	GWAR Course - PHYS 366 Recommended	3
			University Electives	4
	TOTAL UNITS	15	TOTAL UNITS	15

Plan Assumptions

This two-year plan assumes students have completed:

- Math sequence of Calculus I-III, equivalent to SSU courses:
 - MATH 161 - Differential and Integral Calculus I GE Area B4 Units: 4
 - MATH 211 - Differential and Integral Calculus II Units: 4
 - MATH 261 - Multivariable Calculus Units: 4
 - MATH 241 - Linear Algebra with Applications in Differential Equations Units: 4
- Physics sequence of Calculus-based Physics, equivalent to SSU courses:
 - PHYS 114 - Introduction to Physics I GE Area B1 Units: 4
 - PHYS 116 - Introductory Laboratory Experience Units: 1
 - PHYS 214 - Introduction to Physics II Units: 4
 - PHYS 216 - Introductory Laboratory Units: 1
- Lower Division GE Pattern meeting*:
 - Lower Division GE Area 1A: English Composition Units: 3
 - Lower Division GE Area 1B: Critical Thinking Units: 3
 - Lower Division GE Area 1C: Oral Communication Units: 3

- o Lower Division GE Area 2: Mathematical Concepts and Quantitative Reasoning (from MATH 161 equivalent, listed above)
- o Lower Division GE Area 3A: Arts Units: 3
- o Lower Division GE Area 3B: Humanities Units: 3
- o Lower Division GE Area 4: Social and Behavioral Sciences Units: 6
- o Lower Division GE Area 5A: Physical Sciences (from PHYS 114 equivalent, listed above)
- o Lower Division GE Area 5B: Life Sciences Units: 3
- o Lower Division GE Area 5C: Laboratory (from PHYS 116 Equivalent, listed above)
- o Lower Division GE Area 6: Ethnic Studies Units: 3

* Any of these that are unmet may be completed as the University Electives identified in the two-year plan above