

Bachelor of Arts in Astrophysics

A Suggested Sequence of Required Courses (2015-2016 Catalog)

F r e s h m a n Y e a r

Fall	Spring
_____ 0 Chapel (CHA 1088)	_____ 0 Chapel (CHA 1088)
_____ 3 REL 1310	_____ 3 REL 1350
_____ 3-4 Foreign Language 1401/1412 (see reverse)	_____ 3-4 Foreign Language 1402/2310 (see reverse)
_____ 3 ENG 1302 or FAS 1302	_____ 3 CHE (1301 recommended/see reverse)
_____ 3 MTH 1321 Calculus I (<i>if eligible</i>)	_____ 3 MTH 1322 Calculus II
_____ 4 PHY 1420 General Physics I	_____ 4 PHY 1430 General Physics II
Total: 16-17	Total: 16-17

S o p h o m o r e Y e a r

Fall	Spring
_____ 3 Foreign Language 2310 (see reverse)	_____ 3 Foreign Language 2320 (see reverse)
_____ 3 MTH 2311 Linear Algebra	_____ 3 ENG 2301 or ENG 2304/2306/GTX
_____ 3 MTH 2321 Calculus III	_____ 4 CSI 1430 Intro to Computer Science I w/ Lab
_____ 3 PHY 2350 Modern Physics	_____ 3 MTH 3325 Ordinary Differential Equations
_____ 4 PHY 2455 Foundations of Astronomy	_____ 3 PHY 2360 Math and Computational Physics
Total: 16	Total: 16

J u n i o r Y e a r

Fall	Spring
_____ 3 ENG 2301 or ENG 2304/2306/GTX	_____ 3 ENG 3300 (see below)
_____ 2-3 Fine Art (see below / see reverse)	_____ 2-3 Fine Art (see below / see reverse)
_____ 1 Lifetime Fitness	_____ 1 Lifetime Fitness
_____ 3 MTH 3326 Partial Differential Equations	_____ 3 Social Science (see below / see reverse)
_____ 3 PHY 3320 Intermediate Classical Mechanics	_____ 3 PHY 3330 Inter. Electricity & Magnetism
_____ 3 PHY 3372 Intro Quantum Mechanics I	_____ 3 PHY 3350 Topics in Astronomy
Total: 15-16	Total: 15-16

S e n i o r Y e a r

Fall	Spring
_____ 3 PHY 4350 Intro. Stellar Structure	_____ 3 PHY 4351 Intro. Modern Cosmology
_____ 0 PHY 4001 Exit Exam	_____ 2-3 Fine Art (see below / see reverse)
_____ 3 Social Science (see below / see reverse)	_____ 3 Social Science (see below / see reverse)
_____ 3 History (see reverse)	_____ 3 History (see reverse)
_____ 3 PSC 2302	_____ 4 Lab Science - Area 1 (see below/reverse)
_____ 1 Lifetime Fitness	_____ 1 Lifetime Fitness
_____ 3 Advanced Elective	
Total: 16	Total: 16-17

*All students must graduate with a minimum of 124 hours,
36 of which must be at the 3000/4000 level.*

Notes about major requirements:

- Lab Science options: BIO 1305/1105, 1306/1106; NSC 1306/1106; BIO 1401; GEO 1401, 1402, 1403, 1405, 1406, 1408
- In order to meet the advanced hour requirement, you may need to take at *least* three 3000-4000 fine art or social science courses.
- English requirement: It is recommended that science majors take ENG 3300 during their junior year rather than ENG 1304. Students may also take FAS 1118, 1128, and 1138 instead of ENG 1304.
- Many required courses are offered only one time each year in either the fall semester or the spring semester.
- Check your degree audit often through Bearweb to ensure that you are making timely progress toward your degree.
- For more information, see the undergraduate catalog.

Please see reverse side for important information on general requirements.

Notes about General Requirements:

- Course selection is subject to availability within each semester.
- Please keep in mind that this is only a suggested sequence. Actual sequence will vary according to possible second major, minor, other program of study (including pre-health), and individual circumstances (ex., transfer credit, dual credit, and credit by exam).
- In order to complete your degree, you must fulfill all requirements in your major and general requirements for the Bachelor of Arts.
- To complete a double major, you may not count any courses toward both majors.
- For more specific information on general requirements, see the undergraduate catalog.
- Check your degree audit often through Bearweb to ensure that you are making timely progress toward your degree.

Social Science (One course from 3 areas - 9 hours):

- ANT 1305 or 3301
- ECO 1305 or 2306 or 2307
- FAS 1303 or 1305, or 3 courses from FAS 1115, 1125, 1135
- GEOG 1300
- HONORS 3100 or 3101 or 3200 or 3201 (for Honors Programs only, at least two must be taken)
- PHI 1306 or 1307 or 1308 or 1321 or 3301 or 3310 or 3312 or 3322
- PSC 1305 or 1306
- PSY 1305
- SOC 1305 or 3 courses from SOC 1105, 1106, 1107

Fine Arts (One course from 3 areas - 7-9 hours):

- ART 1300 or 2302 or 2303
- CLA 3380
- CSS 1301 or 1302 or 1304
- FDM/JOU 1303
- FAS 1306 or 3 courses from FAS 1116, 1126, 1136
- FCS 3313 or 4313
- MUS 1220 or 3322 or 3323 or 4320
- THEA 1206 or 2374

Foreign Language:

- **Option A:** One modern language through 2320 level:
Arabic, Chinese, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, and Swahili
- **Option B:** One classical language through 2320 level or two classical through 1302 level:
Latin, Greek, Hebrew (If available, Akkadian, Aramaic, Syriac, and/or Ugaritic may be used)

Math:

- MTH 1301 (Ideas in Math) or MTH 1320* (Pre-cal) or MTH 1321 (Calculus), STA 1380 or FAS 1309. *Math 1320 is intended only for students who intend to take 1321.

History (choose 2 courses - 6 hours): HIS 1305, 1307, 2365, 2366 or FAS 1304

Lab Science (12 hours) Choose one science course from each area - each must include a lab:

**Credit allowed for only one of these courses.*

Area 1	Area 2	Area 3
BIO 1305/1105 Modern Concepts of Bio	*CHE 1300/1100 Intro to Chemistry	ANT 1404
BIO 1306/1106 Modern Concepts of Bio II	*CHE 1301/1101 Basic Prin of Mod Chem I	ENV 1301/1101 Exploring Env Issues
BIO 1401 General Biology	CHE 1302/1102/Basic Prin of Mod Chem II	ENV 1303/1103 Wildlife Ecology
BIO 1403 Exploring the Living World	*CHE 1405 Chemistry in Society	Or any other lab science including:
*GEO 1401 Earthquakes & Other Disasters	CHE 1341/1146 Intro to Organic Biochemistry	BIO, CHE, GEO, PHY, and FAS 1407
GEO 1402 World Oceans		
*GEO 1403 Environmental Geology	PHY 1404 Light, Vision, and Optics	
*GEO 1405 The Dynamic Earth	PHY 1405 General Physics for BA Students	
GEO 1406 Earth Through Time	PHY 1407 Sound and Acoustics	
GEO 1408 Earth Science	PHY 1408 Gen Physics-Natural & Behav Sci	
	PHY 1420 General Physics I	
NSC 1306/1106 Intro to Neuroscience	PHY 1455 Descriptive Astronomy	

Biology/Chemistry Prerequisite Policies:

- **Biology:** In order to register for BIO 1305 and 1306 students must have either a satisfactory math score on the ACT or SAT OR have completed MTH 1320 (Pre-Calculus) with a grade of B or better.
- **Chemistry:** In order to register for CHE 1301 students must have either a satisfactory math score on the ACT or SAT or have a minimum grade of B in CHE 1300 AND a minimum grade of B in either MTH 1320 (Pre-Calculus) or MTH 1321 (Calculus).