Bachelor of Science Degree – Physics and Mathematics Teaching – Catalog 144 (2021 - 2022)

Freshman Year

This plan is unofficial and should be used for reference only.

First Semester*	(Th-Pr)	Cr		Second Semester	(Th-Pr)	Cr
PHYS 101 Topics in Cont. Physics[1]	(1-0)	1		ASTR 102 Observational Astronomy	(0-3)	1
MATH 171 Analytic Geom. and Calculus[1]	(4-0)	4		PHYS 206 Newtonian Mech. for Engr. and Sci.[1]	(3-0)	3
PHYS 150 Intro to Programming for Physics	(3-0)	3		PHYS 226 Physics of Motion Lab for Sci.[1]	(0-2)	1
ENGL 104 Comp. and Rhetoric	(3-0)	3		MATH 172 Calculus[1]	(4-0)	4
HIST 105 History of the U.S.[2]	(3-0)	3		HIST 106 History of the U.S.[2]	(3-0)	3
SCEN 201 Exp. In Secondary Math/Sci.	(1-1)	1		**INST 222 Found. of Ed. In Multicultural[5,7]**	(3-0)	3
		15				15

Sophomore Year

First Semester	(Th-Pr)	Cr		Second Semester	(Th-Pr)	Cr
PHYS 207 Elect. & Mag. for Engr. and Sci.[1]	(3-0)	3		PHYS 225 Electronic Circuits	(1-4)	3
PHYS 227 Elect. & Mag. Lab for Sci.[1]	(0-3)	1		PHYS 309 Modern Physics[1]	(3-0)	3
PHYS 221 Optics and Thermal Physics[1]	(3-0)	3		PHYS 331 Theoretical Methods I[1]	(3-0)	3
MATH 221 Several Variable Calculus[1]	(4-0)	4		Communication elective[3]	(3-0)	3
MATH 308 Differential Equations[1]	(3-0)	3		**MATH 304 Linear Algebra[7]**	(3-0)	3
		14				15

Junior Year

First Semester	(Th-Pr)	Cr		Second Semester	(Th-Pr)	Cr
PHYS 302 Adv. Mechanics I	(3-0)	3		PHYS 303/305 Adv. Mech. II/Adv. E&M	(3-0)	3
PHYS 304 Adv. Elect. And Magn. I	(3-0)	3		PHYS 327 Experimental Physics[4]	(1-2)	2
PHYS 332 Theoretical Methods II	(3-0)	3		PHYS 328 Experimental Physics II[4]	(1-1)	1
POLS 206 American National Government	(3-0)	3		PHYS 412 Quantum Mechanics I	(3-0)	3
INST 210 Understanding Special Pops.[6]	(3-0)	3		**TEFB 322 Teaching and Schooling**	(2-3)	3
				RDNG 465 Reading in Middle and Sec.[7]	(3-0)	3
		15				15

Senior Year

First Semester	(Th-Pr)	Cr		Second Semester	(Th-Pr)	Cr
PHYS 408 Thermo. And Stat. Mechanics	(4-0)	4		Science or Technical Elective [9]	(3-0)	3
Creative Arts elective[2]	(3-0)	3		POLS 207 State and Local Government	(3-0)	3
Language, Philosophy and Culture elective[2]	(3-0)	3		**STAT 211 Principles of Stat I**		3
MATH 467 Modern Geometry[7]	(3-0)	3		**MATH 376 – Inst. Abstract Algebra[7]**	(3-0)	3
TEFB 324 Teaching Skills II[8]	(2-3)	3		**TEFB 407 Math in Middle and Secondary[7]**	(2-6)	3
		16				15

NOTES:
1. A physics major must complete the foundation courses (ASTR 102, PHYS 101, 150, 206/226, 207/227, 221, 309, 331, MATH 171, 172, 221, 308) with a grade of 'C' or better and have a 2.0 cumulative GPR before taking non-foundation upper-level physics courses.
2. Any course in this category from the approved University Core Curriculum list of courses.
3. Any approved Communication course, except THAR 407.
4. PHYS 327 is an approved W course. PHYS 328 is an approved C course.
5. INST 222 is an approved Social and Behavioral Science, International and Cultural Diversity and Cultural Discourse class.
6. INST 210 is an approved Social and Behavioral Science and International and Cultural Diversity class.
7. There are other classes that may be taken in place of this one. Please consult advisor for options.
8. Students must apply, and be admitted, to aggieTEACH - Science, before beginning this class. Students are required to have 2.75 overall GPA and a 2.5 GPA in content areas.
9. Any upper-division course within the College of Science, College of Geosciences or College of Engineering (except 485/491). Note: students seeking secondary certification through this degree must take MATH 403 – Math and Technology for this elective.

*SCEN 100 or an equivalent course is required for all Freshmen students in their first semester. This is a 0 credit hour course graded S/U.

*** Beginning in the Sophomore Year - Second Semester: PHYS courses are offered only once a year in the semester shown on this plan.***