

Major Program Guide for a B.S.Ed. in Science Education
Concentration: Physics
Suggested Course Sequence for 8-semester plan[#]

Liberal Studies

Profession Education Sequence

Science Education/Earth Science

42 (33) hours (9 hours are met through major requirements in math and science)

23 hours

64 hours

120 hours

Freshman Year							
Fall				Spring			
Prefix or LS requirement	Course number	Title	Credit Hours	Prefix or LS requirement	Course number	Title	Credit Hours
PHYS	130 or 230	Intro or General Physics I	4	CHEM	139	General Chemistry I	4
MATH	146	Precalculus	4	MATH	153	Calculus I	4
C3: COMM	201	Foundations Comm.	3	C1: ENGL	101	Writing and Rhetoric	3
C4	-	Wellness	3	P6	-	World Cultures	3
1 st Year Sem.	190/191	-	3	P1	-	Social Sciences	3
			17				17
Sophomore Year							
Fall				Spring			
Prefix or LS requirement	Course number	Title	Credit Hours	Prefix or LS requirement	Course number	Title	Credit Hours
EDCI	201	Teaching Leadership & ...	3	CHEM	140	Advan. General Chem.	4
BIOL	140	Principles of Biology I	4	BIOL	141	Principles of Biology II	4
PHYS	131 or 231	Intro or General Physics II	4	PHYS	310	Modern Physics	3
C1: ENGL	202	Writing & Critical Inquiry	3	(P1 ULP) PSY	320	Social Sciences	3
SCI	150	Intro. Secondary Sci. Educ.	1				
^Complete the Core Praxis; Apply for admission to Ed Prog.							
			15				14
Junior Year							
Fall				Spring			
Prefix or LS requirement	Course number	Title	Credit Hours	Prefix or LS requirement	Course number	Title	Credit Hours
GEOL	150	Earth,...	3	PHYS	300 or 400	PHYS Upper level	4
P3	-	History	3	SCI	301	Nature of Science	3
EDCI	430	Classroom Management	3	PHYS/CHEM	325/352	Thermo./Phys Chem I	3
MATH	255	Calculus II	4	SPED	240	Exceptional Child	3
P5	-	Fine & Performing Arts	3	GEOL	145	Climate Change and...	3
			16				16
Senior Year							
Fall				Spring			
Prefix or LS requirement	Course number	Title	Credit Hours	Prefix or LS requirement	Course number	Title	Credit Hours
SCI	422	Princ. & Meth. Sci. Educ.	3	SCI	491	Supervised Teach. Science	3
PHYS	380	Research in Physics	2	EDSE	485	Internship II	6
GEOL	141	Earth History...	3	EDSE	495	Seminar	3
EDSE	483	Sec/Spec Sub Area Intern I	2				
P4	-	Humanities	3				
			13				12
							2022

Course Check Sheet for B.S.Ed. in Science Education, Concentration in Earth Sciences

Term	Grade	Course	Hours
Professional Education Sequence			23
		EDCI 201 - Teacher Leadership in a Diverse Society	3
		SPED 240 - The Exceptional Child	3
		EDCI 430 - Culturally Relevant Classroom Management	3
		EDSE 483 - Secondary/Special Subject Area Internship I & Methods	2
		SCI 491 - Supervised Student Teaching in the Sciences	3
		EDSE 485 – Internship II	6
		EDSE 495 – Seminar	3

Science and Math Requirements in Earth and Science Concentration			64
		SCI 150 - Introduction to Secondary Science Education	1
		SCI 301 - Nature of Science	3
		SCI 422 - Principles and Methods of Science Education	3
		MATH 146 - Precalculus	4
		MATH 153 - Calculus I	4
		MATH 255 - Calculus II	4
		BIOL 140 - Principles of Biology I	4
		BIOL 141 - Principles of Biology II	4
		CHEM 139 - General Chemistry I	4
		CHEM 140 - General Chemistry II	4
		GEOL 150 - Earth: Geology, Resources, Hazards, and Environment	3
		GEOL 141 - Earth History and Prehistorical Life	3
		GEOL 145 - Climate Change and Water Resources	3
		PHYS 130 or 230 – Introductory or General Physics I	4
		PHYS 131 or 231 - Introductory or General Physics II	4
		PHYS 310 – Modern Physics	3
		Any 5 hrs from PHYS Upper Level Courses	4
		PHYS 325 – Thermodynamics or CHEM 352 – Chem. Thermo. Dynamics	3
		PHSY 380 – Research in Physics	2

Liberal Studies (C2--Math and C5--Science core areas met with major requirements)			33
		First Year Seminar, 190 or 191	3
		C1: ENGL 101 - Writing and Rhetoric	3
		C1: ENGL 202 – Writing and Critical Inquiry	3
		C3: COMM 201 – Foundations Communication	3
		C4: Wellness; e.g., HEAL 111, HEAL 123, or HSCC 101	3
		P1: Social Science, course 1	3
		P1: Social Science, course 2 (<i>must be from a different discipline than other P1 course</i>)	3
		P3: History	3
		P4: Humanities	3
		P5: Fine & Performing Arts	3
		P6: World Cultures	3
		<i>*Note: at least one of LS perspectives must be an upper-level, 300-400, course</i>	