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

Liberal Studies	42 (33) hours (9 hours are met through major requirements in math and science)
Profession Education Sequence	23 hours
Science Education/Earth Science	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
BIOL	140	Principles of Biology I	4	BIOL	141	Principles of Biology II	4
CHEM	139	General Chemistry I	4	GEOL	150	Earth,…	3
C3: COMM	201	Foundations Comm.	3	MATH	146	Precalculus	4
C1: ENGL	101	Writing and Rhetoric	3	P6	-	World Cultures	3
1st Year Sem.	190/191	-	3	C1: ENGL	202	Writing & Critical Inquiry	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
BIOL	240	Introduction to Genetics	4	BIOL	241	Introduction to Eco & Evo	4
EDCI	201	Teaching Leadership & …	3	MATH	153	Calculus I	4
PHYS	130	General Physics I	4	GEOL	145	Climate Change and…	3
CHEM	140	Advanced Gen. Chemistry	4	P1	-	Social Sciences	3
SCI	150	Intro. Secondary Sci. Educ.	1	P3	-	History	3
Complete the Core Praxis; Apply for admission to Ed Prog.							
			16				17
Junior Year							
Fall				**Spring**			
Prefix or LS requirement	Course number	Title	Credit Hours	Prefix or LS requirement	Course number	Title	Credit Hours
BIOL	306	Evolutionary Biology	3	PHYS	131	General Physics II	4
GEOL	141	Earth History…	3	SCI	301	Nature of Science	3
SPED	240	Exceptional Child	3	(P1 ULP) PSY	320	Social Sciences	3
P5	-	Fine & Performing Arts	3	EDCI	430	Classroom Management	3
C4	-	Wellness	3	P4	-	Humanities	3
			15				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
BIOL	480	Research in Biology	3	EDSE	485	Internship II	6
Upper level		Science Elective	3	EDSE	495	Seminar	3
EDSE	483	Sec/Spec Sub Area Intern I	3^				
			12				12

[#] This plan is a suggestion that should guide registration. Variations of this plan on possible in consult with your advisor.

[*] One of LS perspectives must be an upper-level, 300-400, course

^Only the 2 credit version of the course is required, but the 3 credit is recommended (Internship 2 days per week)

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 (During Student Teaching)	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
		BIOL 140 - Principles of Biology I	4
		BIOL 141 - Principles of Biology II	4
		CHEM 139 - General Chemistry I (CHEM 132 can be substituted)	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 - Introductory Physics I	4
		PHYS 131 - Introductory Physics II	4
		BIOL 240 – Introduction to Genetics	4
		BIOL 241 - Introduction to Ecology and Evolution	4
		BIOL 306 – Evolutionary Biology	3
		Upper level approved science	3
		BIOL 480 – Research in Biology	3

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 (*recommend ULP* PSY 320)	3
		P3: History	3
		P4: Humanities	3
		P5: Fine & Performing Arts	3
		P6: World Cultures	3
		**Note: at least one of LS perspectives must be an upper-level, 300-400, course*	