

Science Education, Biology (9-12) Concentration 2025-2026

Freshman Year							
Fall				Spring			
	Course Number	Course Title	Credits		Course Number	Course Title	Credits
	UNV 1000	Freshman Seminar	1		ENG 1060	Composition II	3
	ENG 1050	Composition I	3		General Education	History	3
	MAT 1070 or MAT 1090	College Algebra or Prealgebra	3 or 4		CHM 1300	General Chemistry I	3
	BIO 1000*	Principles of Biology	3		CHM 1100	General Chemistry Laboratory I	1
	BIOL 1000	Laboratory Investigation and Experiences in General Biology	1		General Education	Physical Education	1
	General Education	Social Science	3		General Education	Fine Art	3
	General Education	Physical Education	1		General Education (ICC) ¹	Social Science	3
Total Credits			15 - 16		Total Credits		17

Sophomore Year							
<ul style="list-style-type: none">Keep your grades high. You need a 2.7 GPA for admission to the Teacher Education ProgramStudy for the Praxis CORE if you do not have the SAT or ACT scores for exemption from taking the Praxis Core.Plan to take Praxis CORE during the Fall of your Sophomore yearPlan to apply to Admission to Teacher Education Program Spring of Sophomore year<ul style="list-style-type: none">You must have a 2.7 GPA or higherYou must have successful completion of EDN 2100You must have less than 9 hours of General Education courses remainingYou must have passing Praxis Core, SAT or ACT scores							
Fall				Spring			
	Course Number	Course Title	Credits		Course Number	Course Title	Credits
	GLY 1150	Earth Science	3		EDN 3150	Developmental Perspectives of Educational Psychology (Grades K-12)	3
	GLYL 1150	Earth Science Lab	1		BIO 1020	General Zoology	4
	EDN 2100	Introduction to Education	3		GLY 1250	Earth History	3
	General Education	Literature	3		GLYL 1250	Earth History Lab	1
	General Education (ICC) ¹	Social Science	3		General Education	Philosophy and Religion	3
	CHM 1310	General Chemistry II	3		SED 3310 (WE) ²	Introduction to Exceptional Children	3
	CHM 1110	General Chemistry Laboratory II	1				
Total Credits			17		Total Credits		17

¹ **Indigenous Cultures and Communities (ICC):** Students entering the university in Fall 2023 or later shall complete the ICC requirement for graduation. Students may satisfy this requirement by completing two 3-credit hour ICC-designated courses. Students who transfer over 60 or more hours shall complete one 3-credit hour ICC course. Designated ICC courses can satisfy other graduation requirements such as gen. eds or major requirements.

Junior Year							
• Apply for the Professional Semester and Graduation during the Spring of Junior Year							
Fall				Spring			
	Course Number	Course Title	Credits		Course Number	Course Title	Credits
	BIO 1010	General Botany	4		PHY 1510	College Physics II	3
	General Education	Elective- Non Math or Science	3		PHY 1570	College Physics II Lab	1
	PHY 1500	College Physics I	3		BIO 3040	Principles of Ecology	4
	PHY 1560	College Physics I Lab	1		BIO 2180	Principles of Genetics	4
	**EDN 3130	Content Area Literacy	3		SCE 3010	Early Laboratory Experiences for Prospective Science Teachers	2
	SCE 3000	Early Experiences for Prospective Science Teachers	1				
Total Credits			15	Total Credits			14

Senior Year							
Fall				Spring			
	Course Number	Course Title	Credits		Course Number	Course Title	Credits
	BIO 3710 (WE) ²	Cell Biology	4		SCE 4490	Internship in Science in Middle/ Secondary Schools	9
	SCE 4000	Teaching Science in the Secondary School	3		SCE 4750 (WD) ²	Professional Seminar in Science in Middle/ Secondary Schools	3
	BIO 4310 or BIO 4990 or BIOS 3XXX ³	Biometrics or Research in Biology or Special Topics in Biology	3-4				
	BIO 4220	Evolution	3				
Total Credits			13-14	Total Credits			12

² **Writing Intensive Program:** Students must complete a combined total of 9 credit hours of Writing Enriched (WE) and Writing in the Discipline (WD) coursework. One course must be a WD course. This degree includes required courses that cover your needs for this requirement (SED 3310 WE, BIO 3710 WE, and SCE 4750 WD). You will not need to take additional Writing Intensive courses. Double majors need only fulfill the Writing Intensive Program requirement once. NOTE: Successful completion (grade of “C” or better) of ENG 1050 is a prerequisite for all WE or WD courses.

³ **Biology Elective:** All students should review the Biology Course Offerings in the Academic Catalog to see availability.

BIO 4310 is offered in Fall Even Years

Additional Notes

- **ALL GENERAL EDUCATION COURSES CAN BE INTERCHANGED**
- ***Note:** C or higher is required in BIO 1000 to matriculate to other BIO Courses in the major
- ****Must be admitted to the Teacher Education Program to take EDN 3130. A GPA of 2.7 or better and passing praxis scores are required to be admitted to the Teacher Education Program)**
- Twelve hours of natural sciences and mathematics within this degree count toward gen. ed. requirements. Students should only take those natural sciences and mathematics courses required by the degree program.
- QPA Requirements for Baccalaureate Graduation: “Have a minimum overall cumulative quality point average of 2.0 and have a minimum cumulative quality point average of 2.0 in all work attempted at the University of North Carolina at Pembroke; Have a minimum overall cumulative quality point average of 2.0 in the major field of study”