SBIO Bachelor of Science in Science Education (9-12) Biology Concentration

INDIGENOUS CULTURE satisfy this requirement by c	S and COMMUNITIES (ICC) S	tudents enter	of Science in Science Education (9-12) Biology Concentration ing the University in Fall 2022 or later, as a requirement for graduation, shall complete the ICC Requirement. Students may signated courses OR one 3-credit hour approved ICC designated course and an ICC designated and department approved co-
curricular learning experience	ce. Transfer students with over 60	0 hours will be	a required to complete one course or the approved departmental experiential learning experience. Designated ICC courses and n requirements and need not increase the total number of hours required for graduation.
			the ability of students to write effectively and appropriately in both general writing and professional writing in their
disciplines. The program of		urses and Wi	riting in the Discipline courses. Students must complete nine semester credit hours of Writing Enriched and Writing in
Freshman Seminar/Gener	al Education	45(33)	Twelve hours of natural sciences and mathematics may count toward general education requirements
	UNV 1000	1	Freshman Seminar Students transferring in more than 15 credit hours are exempt.
Communication Skills		6 hours	total
	ENG 1050	3	Composition I
	ENG 1060	3	Composition II
Arts & Humanities		12 hours	s total Choose one course from each of the 4 areas
	Fine Arts	3	ART 1450, 2050, 2080, 2090, MUS 1020, 1040, 2940, 2980, THE 2500
	Literature	3	ENG 2010,2020,2030,2050,2060, 2080, 2090, 2100, 2180, 2190, 2230, 2240, 2410, 2470, 2480, AIS 2200
	History	3	HIS 1010,1020,1030,1100,1110,1140,1150,AIS 1100, AIS1110
	Philosophy/Religion	3	PHI 1000, 1010, 2040, 2070,REL 1080, 1300
Social Sciences			total Choose one course from each of 3 out of these 5 areas Economics ECN 1000, 2020, 2030, 2410 Geography
Social Sciences			10, 1020, 2000, 2060, Political Science PLS 1000, 1010, Psychology PSY 1010, Sociology SOC 1020, 1050, 2090
		3	
		3	
		3	
General Education Elective			Any additional course from the Arts & Humanities Division or Social Science Division as listed in the General Education Requirements section of the current UNCP Academic Catalog.
		3	
Physical Education		2 hours	total Choose from PED 1010, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1410, 1450, 1460, 1770 1790, 1800 (MSC), 1810(THE), 1820(THE), 1900, 1910, 1950
	PED 1	1	
	PED 1	1	
Professional Education	Requirements*	12 hours	s total
	EDN 2100	3	Introduction to Education (Required for admission to the Teacher Education Program. Prerequisites: 30 semesters hours and a GPA of 2.7 or better)
	SED 3310	3	Introduction to the Exceptional Child
	EDN 3140	3	Aspects of Human Development and Educational Psychology for Grades 6-12
	EDN 3130	3	Content Area Literacy (Must be admitted to the Teacher Education Program to take this class. A GPA of 2.7 or better and passing Praxis scores are required to be admitted to the Teacher Education Program)
Essential Standards *		57 hours	s total Biology (9-12) Concentration
	BIO 1000	3	Principles of Biology
	BIO 1000L	1	Principles of Biology Lab
	BIO 1010	4	General Botany and General Botany Lab (must sign up for both at same time)
	BIO 1020	4	General Zoology and General Zoology Lab (must sign up for both at same time)
	BIO 3040	4	Principles of Ecology and Principles of Ecology Lab (must sign up for both at same time)
	BIO 2180	4	Principles of Genetics and Principles of Genetics Lab (must sign up for both at same time)
	BIO 3710	4	Cell Biology and Cell Biology Lab (must sign up for both at same time)
	BIO 3710 BIO 4220	4	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B	4	Cell Biology and Cell Biology Lab (must sign up for both at same time)
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510	4	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310	4	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990	4 3 IO 3510; Bio	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990 BIOS 3xxx	4 3 IO 3510; Bio	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution metrics BIO 4310; Research in Biology BIO 4990; or BIOS 3xxx Special Topics in Biology
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990 BIOS 3xxx MAT 1070 or	4 3 IO 3510; Bio 3-4	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution metrics BIO 4310; Research in Biology BIO 4990; or BIOS 3xxx Special Topics in Biology College Algebra or
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990 BIOS 3xxx MAT 1070 or MAT 109	4 3 IO 3510; Bio	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution Imetrics BIO 4310; Research in Biology BIO 4990; or BIOS 3xxx Special Topics in Biology College Algebra or Pre-calculus
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990 BIOS 3xxx MAT 1070 or MAT 109 CHM 1300	4 3 IO 3510; Bio 3-4	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution metrics BIO 4310; Research in Biology BIO 4990; or BIOS 3xxx Special Topics in Biology College Algebra or Pre-calculus General Chemistry I PHY 1560 3 College Physics II
Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990 BIOS 3xxx MAT 1070 or MAT 109 CHM 1300 CHM 1100	4 3 00 3510; Bio 3-4 3-4 3-4 3 1	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution metrics BIO 4310; Research in Biology BIO 4990; or BIOS 3xxx Special Topics in Biology College Algebra or Pre-calculus General Chemistry I PHY 1560 3 College Physics II General Chemistry I Lab PHY 1570 1 College Physics II Lab
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Select one (minimum of 3	BIO 3710 BIO 4220 hours): Research Strategies B BIO 3510 BIO 4310 BIO 4990 BIOS 3xxx MAT 1070 or MAT 109 CHM 1300 CHM 1310 CHM 1500 PHY 1500 PHY 1560 SCE 3000 SCE 3010	4 3 10 3510; Bio 3-4 3-4 3-4 3 1 1 3 1 1 8 hours 1 2	Cell Biology and Cell Biology Lab (must sign up for both at same time) Evolution metrics BIO 4310; Research in Biology BIO 4990; or BIOS 3xxx Special Topics in Biology College Algebra or Pre-calculus General Chemistry I PHY 1560 General Chemistry I PHY 1570 General Chemistry II GLY 1150 General Chemistry II GLY 1150 General Chemistry II GLY 1150 General Chemistry II GLY 1250 Earth Science Barth Science General Chemistry II GLY 1250 General Chemistry II Lab GLY 1250 General Chemistry II Lab GLY 1250 Gattry Experiences for Prospective Science Teacher Early Experiences for Prospective Science Teacher Early Laboratory Experiences for Prospective Science Teacher

*Science Education Majors must earn a "C-" or better in all courses listed under the indicated sections. A grade of "C" or better must be earned in repeated courses. ***These are the only courses that can be taken during the Professional Semester. The Professional Semester is the final semester.