

B.Sc. BIOLOGY CURRICULUM¹
(For students following the 2016-2017 UNBC calendar)

FIRST YEAR COURSES		
FALL	WINTER	
BIOL 103-3 and BIOL 123-1	BIOL 104-3 and BIOL 124-1	
CHEM 100-3 and CHEM 120-1	CHEM 101-3 and CHEM 121-1	
*MATH 100-3 or MATH 105-3 or MATH 152-3	*MATH 101-3 (if took MATH 100/105 first semester) Recommended not required	
PHYS 100-4 or PHYS 110-4 (PHYS 115 if missing Physics 12)	PHYS 101-4 or PHYS 111-4 (or PHYS 100-4 if took PHYS 115 first semester)	
[Elective-3 suggested]	ENGL 170-3 (also available in fall semester) or NRES 100-3	
15-18 credit hours	18 credit hours	TOTAL 33-36 credit hours
*MATH 100 and MATH 101 are strongly recommended		
SECOND YEAR COURSES		
FALL	WINTER	
BIOL 201-3	BIOL 202-3	
BIOL 204-3	BIOL 203-3	
CHEM 201-3	BIOL 210-3 (Fall or Winter)	
STAT 240-3 (Fall or Winter)	CHEM 203-3	
	CHEM 204-3	
6 additional credit hours of courses at the 200 level or above		
15-18 credit hours	15-18 credit hours	TOTAL 33 credit hours
THIRD YEAR COURSES		
FALL	WINTER	
BIOL 311-3	BIOL 323-3	
SELECT 2 OF BIOL 301-3, BIOL 307-3, BIOL 308-3, BIOL 318-3	BIOL 325-3	
Subject requirement or elective - 6	SELECT 1 OF BIOL 304-3 OR BIOL 321-3	
	Subject requirement or elective - 6	
15 credit hours	15 credit hours	TOTAL 30 credit hours

¹At least one course with Social Sciences content must be taken from the following list:

BIOL 304-3, BIOL 350-3, BIOL 420-3, or BIOL 421-3 (these may also count as Subject Requirements); or any course with the following prefixes: ANTH, COMM, ECON, EDUC, ENPL, ENV5, FNST, INTS, NORS, ORTM, POLS, or PSYC.

FOURTH YEAR COURSES

FALL	WINTER	
BIOL 410-3	BIOL 411-3	
SELECT 1 OF BIOL 404-3, BIOL406-3, BIOL 412-3		
Subject requirement or elective - 9	Subject requirement or elective - 12	
15 credit hours	15 credit hours	TOTAL 30 credit hours

126 required credit hours total

Courses Required	Semester	Pre-requisites
BIOL 103-3 Introductory Biology I	F & S	Biology 11 or 12
BIOL 123-1 Introductory Biology I Laboratory	F & S	BIOL 103 (concurrent)
BIOL 104-3 Introductory Biology II	W & S	Biology 11 or Biology 12 or BIOL 101 or BIOL 103
BIOL 124-1 Introductory Biology II Laboratory	W & S	BIOL 104 (concurrent)
CHEM 100-3 General Chemistry I	F & S	Math 12 (Principles of Math 12 or Pre-Calculus 12) or MATH 115 (concurrent)
CHEM 120-1 General Chemistry Lab I	F	CHEM 100 (co-requisite)
CHEM 101-3 General Chemistry II	W & S	Math 12 (Principles of Math 12 or Pre-Calculus 12) or MATH 115
CHEM 121-1 General Chemistry Lab II	W	CHEM 120 & CHEM 101 (concurrent)
MATH 100-3 Calculus I	F & S	Math 12 (Principles of Math 12 or Pre-Calculus 12) or MATH 115
MATH 101-3 Calculus II	W	MATH 100 or MATH 105
MATH 152-3 Calculus for Non-majors	F & W & S	Math 12 (Principles of Math 12 or Pre-Calculus 12) or MATH 115
MATH 105-3 Enriched Calculus	W	Math 12 (Principles of Math 12 or Pre-Calculus 12) or MATH 115
ENGL 170-3 Writing and Communication Skills	F & W	None
NRES 100-3 Communications in Nat. Res. and Env. Studies	W	None
PHYS 110-4 Introductory Physics I: Mechanics	F	(Physics 12 or PHYS 115) & (Principles of Math 12 or PreCalculus 12 or MATH 115) & (MATH 100 or MATH 105)
PHYS 100-4 Introduction to Physics I	F/W	Physics 12 or PHYS 115
PHYS 111-4 Introductory Physics II: Waves and Electricity	W	PHYS 110 or PHYS 100 (B minimum) & MATH 101 (concurrent)
PHYS 101-4 Introduction to Physics II	W	PHYS 100 or PHYS 110
BIOL 201-3 Ecology	F	(BIOL 102 or (BIOL 104 & BIOL 124)) & (BIOL 101 or (BIOL 103 & BIOL 123) concurrent))
BIOL 202-3 Invertebrate Zoology	W	(BIOL 102 or (BIOL 104 & BIOL 124)) & (BIOL 101 or (BIOL 103 & BIOL 123) concurrent))
BIOL 203-3 Microbiology	W	(BIOL 102 or (BIOL 104 & BIOL 124)) & (BIOL 101 or (BIOL 103 & BIOL 123) concurrent))
BIOL 204-3 Plant Biology	F	(BIOL 102 or (BIOL 104 & BIOL 124)) & (BIOL 101 or (BIOL 103 & BIOL 123) concurrent))
BIOL 210-3 Genetics	F&W	(BIOL 101 or (BIOL 103 & BIOL 123)) & (BIOL 102 or (BIOL 104 and BIOL 124) (concurrent))
CHEM 201-3 Organic Chemistry I	F&S	CHEM 101 & CHEM 121
CHEM 203-3 Organic Chemistry II	W&S	CHEM 201
CHEM 204-3 Introductory Biochemistry	W&S	CHEM 201 & (BIOL 101 or (BIOL 103 & BIOL 123)) & (BIOL 104 & BIOL 124)) & CHEM 203 (Concurrent)
STAT 240-3 Basic Statistics	F&W&S	None
BIOL 311-3 Cell and Molecular Biology	F	BIOL 210, & (CHEM 204 or CHEM 220)

BIOL 323-3 Evolutionary Biology	W	BIOL 201 & BIOL 210
BIOL 325-3 Ecological Analyses	W	BIOL 201 & (MATH 240 or STAT 240)
Choose ONE of: BIOL 304-3 Plants, Society & the Environment or BIOL 321-3 , Animal Physiology	W	Check calendar for course-specific prerequisites
Choose TWO of: BIOL 301-3 Systematic Botany, BIOL 307-3 Ichthyology & Herpetology, BIOL 308-3 Ornithology & Mammalogy, or BIOL 318-3 Fungi & Lichens	F	(BIOL 101 or (BIOL 103 & BIOL 123)) & (BIOL 102 or (BIOL 104 and BIOL 124))
BIOL 410-3 Population & Community Ecology	F	BIOL 325
BIOL 411-3 Conservation Biology	W	BIOL 201
Choose ONE of: BIOL 404-3 Plant Ecology, BIOL 406-3 Fish Ecology or BIOL 412-3 Wildlife Ecology	F	Check calendar for course-specific prerequisites

Subject requirements: Fifteen additional credit hours chosen from the following, of which at least six credit hours must be at the 400 level: Any 300 or 400 level BIOL courses, ENSC406-3 Environmental Modelling or FSTY 307-3 Disturbance Ecology & Forest Health. At least one course must be taken from BIOL 304-3, Plants, Society & the Environment, BIOL 350-3 Ethnobotany, BIOL 420-3 Animal Behaviour, BIOL 421-3 Insects, Fungi & Society or any course with one of the following prefixes: ANTH, COMM, ECON, EDUC, ENPL, ENVS, FNST, INTS, NORS, ORTM, POLS, PSYC.

Subtotal: 108 credit hours

Elective requirement: minimum 18 credit hours to ensure completion of a minimum of 126 credit hours.

TOTAL: 126 CREDIT HOURS