

PROGRAM SUMMARY

- **Credit Hours:** 120 hours
- **Concentrations:** [optional] Cell Biology/Physiology; Ecology/Environmental Biology; Microbiology
- **Declaring the Major:** Minimum Overall GPA and Biology GPA of 2.0 required; change of major form accepted year-round. Must be currently enrolled in or have completed BIOL 2120 or BIOL 2130, co-enrolled in CHEM 1251 and CHEM 1251L with minimum grades of C. Students with prior credit earned at UNC Charlotte must have a minimum overall and BIOL GPA of 2.0.
- **Advising (For the Major):** Handled by Department of Biological Sciences Advisor assigned upon admission to major. Required with less than 60 earned credit hours, for all students with GPA below 2.0, for 90 credit hour degree check, recommended each semester.
- **Advising (For General Education):** Handled by Department of Biological Sciences Advisor assigned upon admission to major.
- **Minimum Grades/GPA:** After twice receiving a grade below C in any of the following courses, BIOL 2120, 2130 and 2140L, a student cannot enroll in the course again. A student who has two successive semesters with a cumulative GPA in Biology of less than 2.0 is ineligible for continuation in bachelor degree programs in Biology. Major and overall GPA of 2.0 required for graduation.
- **Teacher Licensure:** Yes
- **Evening Classes Available:** No
- **Weekend Classes Available:** No
- **Other Information:** Biology minor, Biotechnology minor, Undergraduate Research, Field Courses, Departmental Honors, Beta Beta Beta National Honor Society, Early Entry Master's degrees
- **Contact(s):** Undergraduate Coordinator, email: biooffice@uncc.edu

PROGRAM REQUIREMENTS

The B.S. requires a total of 44 hours of Biology courses, including 5 laboratory courses at the 3000 or 4000 level, as well as 27 additional credits in Physics, Chemistry, and Mathematics. The B.S. is a relatively structured program recommended for students planning a career in an area of the Biological Sciences; in particular, those planning to attend professional school or graduate school for a Master's or Ph.D. degree.

Areas	Credit Hours	Description
Pre-Major/Prerequisites	0	Enrollment in BIOL 2120 or BIOL 2130, co-enrollment in CHEM 1251 + L. Continuing students must have a C or better for all courses and a minimum combined GPA of 2.0. Students may not repeat these Biology courses more than twice or these Chemistry courses more than three times.
Major	44	Required courses in the major will count towards university General Education requirements for Natural Sciences, Oral Communications and Writing Intensive requirement.
General Education (not satisfied by other major requirements)	27-30	Hours do not include those requirements that are satisfied within the major. Transfer students with an associate's degree are exempt from most General Education, but must complete Writing Intensive requirement within the major.
Related Work	30	Completion of CHEM 1251, 1251L, 1252, 1252L, 2131, 2131L, 2132, and 2132L, PHYS 1101, 1101L, 1102, and 1102L, , STAT 1220, 1221, or 1222 and MATH 1120 or 1241
Foreign Language	0-8	Foreign Language proficiency through 1202 is required either by proficiency testing (no credit hours awarded), 3 years of a foreign language in high school (no credit hours awarded), or 1201/1202 course completion. If no credit hours are awarded, these credit hours will need to be accounted for through elective coursework.
Electives	8-19	As needed to complete 120 hours total.
Total Credit Hours	120	

SUGGESTED PLAN OF STUDY

Freshman Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
UWRT 1103	Writing and Inquiry in Academic Contexts I and II	3 or 4	X		Or UWRT 1104
MATH 1100	College Algebra and Probability	3	X		
LBST 11XX	LBST 1100 Series: Arts and Society	3	X		
BIOL 2120	General Biology I	3			
CHEM 1251	Principles of Chemistry I	3	X		
CHEM 1251L	Principles of Chemistry I Laboratory	1	X		
<i>Spring Semester</i>					
XXXX XXXX	Elective	3			
MATH 1120	Calculus	3	X		
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
BIOL 2130	General Biology II	3			
BIOL 2140L	General Biology II Laboratory	2			
CHEM 1252	Principles of Chemistry II	3	X		
CHEM 1252L	Principles of Chemistry II Laboratory	1	X		
					34 Credit Hours for Year

Sophomore Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
BIOL 3111	Cell Biology	3			
BIOL 3111L	Cell Biology Laboratory	1	X	W	
CHEM 2131	Organic Chemistry I	3			
CHEM 2131L	Organic Chemistry I Laboratory	1			
STAT 1221	Elements of Statistics I	3			
XXXX 1201	Foreign Language 1201	3			
<i>Spring Semester</i>					
BIOL 3166	Genetics	3			
CHEM 2132	Organic Chemistry II	3			
CHEM 2132L	Organic Chemistry II Laboratory	1			
LBST 2301	Critical Thinking and Communication	3	X		
XXXX XXXX	Social Science - General Education Requirement	3	X		
XXXX 1202	Foreign Language 1202	3			
					30 Credit Hours for Year

Junior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
XXXX XXXX	Writing Intensive Course	3	X	W	
BIOL 3144	Ecology	3			
BIOL 3273	Animal Physiology	3			
BIOL XXXX	Evolution oriented BIOL course	3			
BIOL XXXX	Biology Electives*	8	X	W	*Must include at least 2 Labs and 1 "W" course
PHYS 1101	Introductory Physics I	3			
PHYS 1101L	Introductory Physics I Laboratory	1			
PHYS 1102	Introductory Physics II	3			
PHYS 1102L	Introductory Physics II Laboratory	1			
					31 Credit Hours for Year

Senior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
BIOL 4600	Senior Seminar	2	X	W,O	
BIOL XXXX	Biology Electives**	11			**Must include at least 2 Labs
XXXX XXXX	Electives	15			
					28 Credit Hours for Year

ADVISING RESOURCES

- General Education Requirements for ALL Students: ucol.uncc.edu/general-education
- Undergraduate Catalog: catalog.uncc.edu
- Central Advising website: advising.uncc.edu
- College of Liberal Arts & Sciences advising website: clas.uncc.edu/students/advising-news/
- University Advising Center website: advisingcenter.uncc.edu

SUGGESTED PLAN OF STUDY – B.S. IN BIOLOGY WITH A CONCENTRATION IN CELL BIOLOGY/PHYSIOLOGY

Freshman Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
UWRT 1103	Writing and Inquiry in Academic Contexts I and II	3 or 4	X		Or UWRT 1104
MATH 1100	College Algebra and Probability	3	X		
LBST 11XX	LBST 1100 Series: Arts and Society	3	X		
BIOL 2120	General Biology I	3			
CHEM 1251	Principles of Chemistry I	3	X		
CHEM 1251L	Principles of Chemistry I Laboratory	1	X		
<i>Spring Semester</i>					
XXXX XXXX	Elective	3			
MATH 1120	Calculus	3	X		
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
BIOL 2130	General Biology II	3			
BIOL 2140L	General Biology II Laboratory	2			
CHEM 1252	Principles of Chemistry II	3	X		
CHEM 1252L	Principles of Chemistry II Laboratory	1	X		

34 Credit Hours for Year

Sophomore Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
BIOL 3111	Cell Biology	3			
BIOL 3111L	Cell Biology Laboratory	1	X	W	
CHEM 2131	Organic Chemistry I	3			
CHEM 2131L	Organic Chemistry I Laboratory	1			
STAT 1221	Elements of Statistics I	3			
XXXX 1201	Foreign Language 1201	3			
<i>Spring Semester</i>					
BIOL 3166	Genetics	3			
CHEM 2132	Organic Chemistry II	3			
CHEM 2132L	Organic Chemistry II Laboratory	1			
LBST 2301	Critical Thinking and Communication	3	X		
XXXX XXXX	Social Science - General Education Requirement	3	X		
XXXX 1201	Foreign Language 1202	3			

30 Credit Hours for Year

Junior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
XXXX XXXX	Writing Intensive Course	3	X	W	
BIOL 3144	Ecology	3			
BIOL 3273	Animal Physiology	3			
BIOL 3273L	Animal Physiology Lab	1	X	W	
BIOL XXXX	Evolution oriented BIOL course	3			
BIOL XXXX	Biology Elective	6			
PHYS 1101	Introductory Physics I	3			
PHYS 1101L	Introductory Physics I Laboratory	1			
PHYS 1102	Introductory Physics II	3			
PHYS 1102L	Introductory Physics II Laboratory	1			

30 Credit Hours for Year

Senior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
BIOL 4600	Senior Seminar	2	X	W,O	
BIOL XXXX	Biology Electives*	12			*Must include at least 3 Labs and one course from each subarea: Subcellular Topics, Structure and Function, and Advanced Physiology
XXXX XXXX	Electives	13			

29 Credit Hours for Year

ADVISING RESOURCES

- General Education Requirements for ALL Students: ucol.uncc.edu/general-education
- Undergraduate Catalog: catalog.uncc.edu
- Central Advising website: advising.uncc.edu
- College of Liberal Arts & Sciences advising website: clas.uncc.edu/students/advising-news/
- University Advising Center website: advisingcenter.uncc.edu

SUGGESTED PLAN OF STUDY – B.S. IN BIOLOGY WITH A CONCENTRATION IN ECOLOGY/ENVIRONMENTAL BIOLOGY

Freshman Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
UWRT 1103	Writing and Inquiry in Academic Contexts I and II	3 or 4	X		Or UWRT 1104
MATH 1100	College Algebra and Probability	3	X		
LBST 11XX	LBST 1100 Series: Arts and Society	3	X		
BIOL 2120	General Biology I	3			
CHEM 1251	Principles of Chemistry I	3	X		
CHEM 1251L	Principles of Chemistry I Laboratory	1	X		
<i>Spring Semester</i>					
XXXX XXXX	Elective	3			
MATH 1120	Calculus	3	X		
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
BIOL 2130	General Biology II	3			
BIOL 2140L	General Biology II Laboratory	2			
CHEM 1252	Principles of Chemistry II	3	X		
CHEM 1252L	Principles of Chemistry II Laboratory	1	X		

34 Credit Hours for Year

Sophomore Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
BIOL 3111	Cell Biology	3			
BIOL 3111L	Cell Biology Laboratory	1	X	W	
CHEM 2131	Organic Chemistry I	3			
CHEM 2131L	Organic Chemistry I Laboratory	1			
STAT 1221	Elements of Statistics I	3			
XXXX 1201	Foreign Language 1201	3			
<i>Spring Semester</i>					
BIOL 3166	Genetics	3			
CHEM 2132	Organic Chemistry II	3			
CHEM 2132L	Organic Chemistry II Laboratory	1			
LBST 2301	Critical Thinking and Communication	3	X		
XXXX XXXX	Social Science - General Education Requirement	3	X		
XXXX 1201	Foreign Language 1202	3			

30 Credit Hours for Year

Junior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
XXXX XXXX	Writing Intensive Course	3	X	W	
BIOL 3144	Ecology	3			
BIOL 3144L	Ecology Lab	1	X	W	
BIOL 3273	Animal Physiology	3			
BIOL XXXX	Evolution oriented BIOL course	3			
BIOL 4121	Biometry*	4			*Satisfies one upper level lab
PHYS 1101	Introductory Physics I	3			
PHYS 1101L	Introductory Physics I Laboratory	1			
PHYS 1102	Introductory Physics II	3			
PHYS 1102L	Introductory Physics II Laboratory	1			

28 Credit Hours for Year

Senior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
BIOL 4600	Senior Seminar	2	X	W,O	
BIOL XXXX	Biology Electives**	11			**Must include at least 2 Labs
BIOL 4000	Environmental Problems	3			
XXXX XXXX	Electives	13			

29 Credit Hours for Year

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- University Advising Center website: advisingcenter.uncc.edu

SUGGESTED PLAN OF STUDY – B.S. IN BIOLOGY WITH A CONCENTRATION IN MICROBIOLOGY

Freshman Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
UWRT 1103	Writing and Inquiry in Academic Contexts I and II	3 or 4	X		Or UWRT 1104
MATH 1100	College Algebra and Probability	3	X		
LBST 11XX	LBST 1100 Series: Arts and Society	3	X		
BIOL 2120	General Biology I	3			
CHEM 1251	Principles of Chemistry I	3	X		
CHEM 1251L	Principles of Chemistry I Laboratory	1	X		
<i>Spring Semester</i>					
XXXX XXXX	Elective	3			
MATH 1120	Calculus	3	X		
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
BIOL 2130	General Biology II	3			
BIOL 2140L	General Biology II Laboratory	2			
CHEM 1252	Principles of Chemistry II	3	X		
CHEM 1252L	Principles of Chemistry II Laboratory	1	X		
					34 Credit Hours for Year

Sophomore Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
BIOL 3111	Cell Biology	3			
BIOL 3111L	Cell Biology Laboratory	1	X	W	
CHEM 2131	Organic Chemistry I	3			
CHEM 2131L	Organic Chemistry I Laboratory	1			
STAT 1221	Elements of Statistics I	3			
XXXX 1201	Foreign Language 1201	3			
<i>Spring Semester</i>					
BIOL 3166	Genetics	3			
CHEM 2132	Organic Chemistry II	3			
CHEM 2132L	Organic Chemistry II Laboratory	1			
LBST 2301	Critical Thinking and Communication	3	X		
XXXX XXXX	Social Science - General Education Requirement	3	X		
XXXX 1201	Foreign Language 1202	3			
					30 Credit Hours for Year

Junior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
LBST 2XXX	LBST 2101, LBST 2102, or LBST 22XX	3	X		
XXXX XXXX	Writing Intensive Course	3	X	W	
BIOL 3144	Ecology	3			
BIOL 3273	Animal Physiology	3			
BIOL 4250	Microbiology	3			
BIOL 4250L	Microbiology Lab	1	X	W	
BIOL 4257	Microbial Metabolism and Physiology	3			
BIOL XXXX	Evolution oriented BIOL course	3			
PHYS 1101	Introductory Physics I	3			
PHYS 1101L	Introductory Physics I Laboratory	1			
PHYS 1102	Introductory Physics II	3			
PHYS 1102L	Introductory Physics II Laboratory	1			
					30 Credit Hours for Year

Senior Year					
Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
BIOL 4600	Senior Seminar	2	X	W,O	
BIOL 4251	Immunology	3			
BIOL 4256	Pathogenic Bacteriology	3			
BIOL XXXX	Microbiology Option Core Elective*	3			*Select from BIOL 4199 Molecular Biology or BIOL 4255 Bacterial Genetics
BIOL XXXX	Biology Electives**	7			**Must be selected from courses approved for the option and include one Lab.
BIOL XXXX	Biology Electives***	2			*** Must include at least 2 Labs
XXXX XXXX	Electives	7			
					26 Credit Hours for Year

ADVISING RESOURCES

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- University Advising Center website: advisingcenter.uncc.edu