

BIOLOGICAL SCIENCES, B.S.

Degree Requirements (120 hours)

Program of Study

Requirements	Credit Hours
1. Carolina Core	32-44
2. College Requirements	15-18
3. Program Requirements	30-45
4. Major Requirements	28

Founding Documents Requirement

All undergraduate students must take a 3-credit course or its equivalent with a passing grade in the subject areas of History, Political Science, or African American Studies that covers the founding documents including the United State Constitution, the Declaration of Independence, the Emancipation Proclamation and one or more documents that are foundational to the African American Freedom struggle, and a minimum of five essays from the Federalist papers. This course may count as a requirement in any part of the program of study including the Carolina Core, the major, minor or cognate, or as a general elective. Courses that meet this requirement are listed here (<https://academicbulletins.sc.edu/undergraduate/founding-document-courses/>).

1. Carolina Core Requirements (32-44 hours)

CMW – Effective, Engaged, and Persuasive Communication: Written (6 hours)

Must be passed with a grade of C or higher.

- any CC-CMW courses (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

ARP – Analytical Reasoning and Problem Solving (6-8 hours)

- MATH 122* or MATH 141*
- MATH 142* or MATH 170* or MATH 172*

Note: MATH 141 & MATH 142 are recommended. However, successful completion of MATH 122 and MATH 170, or MATH 172 may be substituted.

SCI – Scientific Literacy (8 hours)

Must be passed with a grade of C or higher.

- BIOL 101* & BIOL 101L*
- BIOL 102* & BIOL 102L*

GFL – Global Citizenship and Multicultural Understanding: Foreign Language (0-6 hours)

Demonstration of proficiency in one foreign language equivalent to the minimal passing grade on the exit examination in the 122 course is required. Students can demonstrate this proficiency by successfully completing Phase II of the Proficiency Test or by successfully completing the 122 course, including the exit exam administered as part of that course.

- CC-GFL courses (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

It is strongly recommended that students continuing the study of a foreign language begin college-level study of that language in their first semester and continue in that language until their particular foreign language requirement is completed.

GHS – Global Citizenship and Multicultural Understanding: Historical Thinking (3 hours)

- any CC-GHS course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

GSS – Global Citizenship and Multicultural Understanding: Social Sciences (3 hours)

- any CC-GSS course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

AIU – Aesthetic and Interpretive Understanding (3 hours)

- any CC-AIU course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

CMS – Effective, Engaged, and Persuasive Communication: Spoken Component ¹ (3 hours)

- any overlay or stand-alone CC-CMS course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

INF – Information Literacy ¹ (0-3 hours)

- any overlay or stand-alone CC-INF course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

VSR – Values, Ethics, and Social Responsibility (3 hours)

- any overlay or stand-alone CC-VSR course (<https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/>)

¹ **Carolina Core Stand Alone or Overlay Eligible Requirements** – Overlay-approved courses offer students the option of meeting two Carolina Core components in a single course. A maximum of two overlays is allowed. The total Carolina Core credit hours must add up to a minimum of 31 hours. Some programs may have a higher number of minimum Carolina Core hours due to specified requirements.

2. College Requirements (15-18 hours)

Foreign Language (0-3 hours)

- only if needed to meet 122-level proficiency

Analytical Reasoning (6 hours)

- STAT 205*
- CSCE 102*

History (3 hours)

The College of Arts and Sciences requires one additional GHS course beyond the Carolina Core GHS requirement.

- If the Carolina Core GHS requirement is fulfilled by a **U.S. history** course, the College of Arts and Sciences history requirement must be fulfilled by a **non-U.S. history** course.

- If the Carolina Core GHS requirement is fulfilled by a **non-U.S. history** course, the College of Arts and Sciences history requirement must be fulfilled by a **U.S. history** course.

Please select the College of Arts and Sciences history requirement from the approved list of U.S. and non-U.S. history courses (<https://academicbulletins.sc.edu/undergraduate/arts-sciences/history-requirement/>).

Social Science and Fine Arts or Humanities (6 hours)

- **Social Science (3 hours)**
 - The College of Arts and Science requires one 3- hour Social Science Course (<https://academicbulletins.sc.edu/undergraduate/arts-sciences/courses-acceptable-social-science/>)
- **Fine Arts/Humanities (3 Hours)**
 - A Bachelor of Science from the College of Arts and Sciences requires one 3-hour Fine Arts/Humanities Course (<https://academicbulletins.sc.edu/undergraduate/arts-sciences/courses-acceptable-fine-arts-humanities/>)

3. Program Requirements (30-45 hours)

Supporting Courses (12 hours)

Course	Title	Credits
CHEM 111	General Chemistry I (*)	3
CHEM 111L	General Chemistry I Lab (*)	1
CHEM 112	General Chemistry II (*)	3
CHEM 112L	General Chemistry II Lab (*)	1
CHEM 333	Organic Chemistry I (*)	3
CHEM 331L	Essentials of Organic Chemistry Laboratory I (*)	1
Total Credit Hours		12

Note: PHYS 201 and PHYS 202 are recommended in addition to the above required courses.

Minor (18 hours) optional

Biological Sciences major may choose a minor consisting of at least 18 credit hours of prescribed courses. (Some minors in the sciences require a minimum of 16 hours.) The subject area of the minor may be related to the major. Students pursuing interdisciplinary minors who wish to use courses in their major department for minor credit must petition the College Committee on Scholastic Standards and Petitions for permission to do so.

The minor is intended to develop a coherent basic preparation in a second area of study. Interdisciplinary minors can be designed with the approval of the assistant dean for academic affairs and advising.

Courses applied toward general education requirements cannot be counted toward the minor. No course may satisfy both major and minor requirements. **All minor courses must be passed with a grade of C or higher.** At least half of the courses in the minor must be completed in residence at the University

A list of minor programs of study can be found at Programs A-Z (<https://academicbulletins.sc.edu/undergraduate/programs-az/>).

Electives (0-33 hours)

120 (or 128) degree applicable credits are required to complete any degree at UofSC. After the cognate, minor or second major is complete,

any additional credits needed to reach 120 (or 128) total credits can be fulfilled by electives. No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences.

4. Major Requirements (28 hours)

A minimum grade of C is required in all major courses.

Major Courses (9 hours)

Course	Title	Credits
BIOL 301	Ecology and Evolution	3
BIOL 302	Cell and Molecular Biology	3
BIOL 303	Fundamental Genetics	3
Total Credit Hours		9

Major Electives (19 hours)

Course	Title	Credits
Select one Physiology course from the following:		3
BIOL 425	Plant Form and Function (optional lab available) ¹	
BIOL 460	Advanced Human Physiology (optional lab available)	
BIOL 465	Domestic Animal Nutrition	
BIOL 543	Comparative Physiology (optional lab available)	
BIOL 549	Plant Physiology ¹	
BIOL 635	Neurophysiology	
Select one Plant Biology course from the following:		3
BIOL 420	Survey of the Plant Kingdom (optional lab available)	
BIOL 423	Medicinal Botany	
BIOL 425	Plant Form and Function (optional lab available) ¹	
BIOL 523	Plant Development (optional lab available)	
BIOL 524	Mycology	
BIOL 525	Marine Plants	
BIOL 526	The Fall Flora	
or BIOL 527	The Spring Flora	
or BIOL 528	The Summer Flora	
BIOL 549	Plant Physiology ¹	
BIOL 670	Plant Ecology (optional lab available)	
BIOL 671	Plant Responses to the Environment	
13 hours of biological sciences majors courses 300 or higher		13
Total Credit Hours		19

¹ BIOL 425 and BIOL 549 may only be used for either the Physiology or Plant credit, **not** both.

Note: At least three courses applied toward the major must have an associated laboratory. No more than three credits of 398/399 may be applied toward the major. Two of 301, 301, or 303 must be completed to advance to 400-600 level courses. **At least twelve credits of major courses must be at the 400-699 level.**