

DEPARTMENT OF SCIENCE

Bachelor of Science in Biology

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Purpose Statement

The purpose of the Bachelor of Science with a Major in Biology is to provide students with a comprehensive exposure to the biological sciences at the molecular, physiological, organismal, and ecological levels. The program will endeavor to produce graduates who not only have a broad foundation in the basic concepts and processes underlying the biological sciences but who will possess the skills that will allow them to participate in the extension of scientific thought and knowledge.

Program Goals

The Biology program has the following goals:

- Provide students with a diverse knowledge in the biological sciences and significant exposure to the physical sciences.
- Prepare students for careers in the medical and health professions, environmental and natural resource management, and conservation areas.
- Foster a fundamental understanding for the process of science and an appreciation for how the life sciences and other areas of science impact our everyday lives and the future of the natural world.
- Provide students with the scientific background needed to understand and participate in the burgeoning biotechnological revolution.
- Provide students with the opportunity to understand themselves and their world from a scientific perspective.
- Serve as a necessary core area in science to allow the development of the other traditional sciences and foster the development of other interdisciplinary minors and majors.
- Provide promising undergraduate students with significant research experiences
- Provide much needed opportunities for interaction with the local citizenry concerning environmental and health care issues and environmental issues through formal classroom instruction, internships, seminars, and informal educational opportunities at local events

Upon successful completion of the biology degree the student should...

- possess an understanding of biological systems at the molecular, physiological, organismal, and ecological levels;
- demonstrate critical thinking skills, analytical techniques, and problem solving skills applied to biological problems;
- possess a knowledge of classical research leading to the fundamental concepts and principles that serve as the foundation for biological inquiry; and
- be able to apply the scientific method to expand scientific knowledge and understanding.

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Admissions Standards for the Biology Program

Students who fulfill the admission requirements of USC Beaufort may enroll as biology majors. Transfer students are required to have a 2.0 GPA.

Curriculum

USCB offers the Bachelor of Science with a major in Biology. To qualify for graduation, a student must meet general education requirements and biology core requirements as stated below.

I. General Education Requirements(38-50)

English

BENG 101, 101L, AND 102 (EACH WITH A GRADE OF "C" OR HIGHER)¹6-7

Numerical and Analytical Reasoning (Biology).....6-8

Either Calculus I (BMTH 141) and Calculus II (BMTH 142) **or** Calculus for Business & Social Sciences (BMTH 122) and Finite Mathematics (BMTH 170)

Speech

BSPC140 3

Liberal Arts

Two courses from the liberal arts offerings² 6

BHIS 101, 102, 111, 112, 115⁽⁶⁾, or 116⁽⁶⁾ 3

Fine Arts³ 3

Social/Behavioral Sciences⁴ 3

Natural Sciences

Two courses involving laboratory requirements⁵ 8

Foreign Languages0-6

Requirement may be satisfied by proficiency. Students shall demonstrate in one foreign language the ability to comprehend the topic and main ideas in written and, with the exception of Latin and Ancient Greek, spoken texts on familiar subjects.

Non-Western Studies⁶0-3

This distribution requirement may be satisfied by one of the above mentioned courses or by additional coursework.

II. Program Requirements (31)

BCHM 111 and 112..... 8

BCHM 333, 331L, 334, and 332L..... 8

BPHY 201 or 211..... 4

BSTA 201..... 3

BMTH 141 and 142 or BMTH 122 and BMTH 170..... 8

III. Major Requirements (27)

BBIO 101⁷ and 102⁷..... (8⁵)

BBIO 301 4

BBIO 302 4

BBIO 303 3

BBIO 460 4

Biology courses 399 or above⁸ 12

141
(No more than three credits of BBIO 399 may be applied toward the major.)

IV. Electives..... (9-19)

Total hours..... 120

¹Students may place out of BENG 101L with an appropriate score on the Freshman English Placement Exam.

²Courses from the following disciplines: BAFR, BANT, BARH, BATS, BECO, BENG, BFRE, BGEO, BGER, BHIS, BHSV, BJOU, BLIN, BMUS, BPHI, BPOL, BPSY, BRLG, BSOC, BSPA, BSPC, BTHE.

³Courses from: BARH, BATS, BMUS, or BTHE.

⁴Courses from: BANT, BECO, BGEO, BHSV, BLIN, BPOL, BPSY, BSOC.

⁵May be satisfied by Biology program requirements.

⁶ The following courses have been approved for this requirement: BANT 102, BANT 301, BANT 312, BANT 317, BANT 351, BANT 352, BANT 552, BARH 349, BENG 291, BGEO 121, BGST 301, BGST 398, BHIS 109, BHIS 115, BHIS 116, BRLG 203, BSOC 315, and BSPA 380B. Non-equivalent transfer credits may be evaluated for approval on a case by case basis by the Program Director for General Education.

⁷ A minimum grade of C in BBIO 101 and 102 is required of all biology majors before they enroll in any BBIO courses numbered above 299.

⁸ Only after a student has completed two of BBIO 301, 302, or 303 with a grade of C or better, may s/he enroll in 399+ level courses.