

Emphasis-Organismal Biology

- [B.A. in Biological Science](#)
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B.A. in Biological Science **Description**

A B.A. in biological science allows for a flexible course of study and can prepare a student for a variety of careers or graduate work in many fields, including medicine, dentistry, pharmacy, veterinary medicine, organismal biology, education, cell or molecular biology, ecology, and conservation biology. Students may choose from optional emphases in ecology and evolutionary biology; molecular, cellular, and microbiology; organismal biology; pre-health biological sciences. This degree also requires students to select a minor course of study from those approved by the College of Liberal Arts.

Minimum Total Credit Hours: 120 **General Education Requirements**

Requirements: See the General Education/Core Curriculum for the College of Liberal Arts. The math requirement for the B.A. in biological science is 6 hours. This may be met with two of the following courses: Math 121 or Math 125 (but not both), Math 115, Math 123, Math 261 or higher.

Course Requirements

A major in biological science for the B.A. degree requires a minimum of 32 semester hours of biology credit including 24 at the 300 level or above. This requirement includes introductory courses (Bisc 160, 161, 162, 163 for 8 credit hours); biology core courses for 12 credit hours: ecology (Bisc 322), genetics (Bisc 336), and physiology (Bisc 330 or Bisc 438 or Bisc 516); biology electives for 12 credit hours (minimum); and the major field achievement test (Bisc 498, which must be taken as a senior) (0 hours). Seminars and nonmajors courses do not satisfy the biology electives requirement. Chem 105, 115, 106, and 116 are required, and chemistry is a recommended minor.

Biology majors may choose to specialize by using their biology electives to add one optional emphasis, which requires a minimum of three courses from the approved list for the emphasis. The same course may not satisfy the biology core courses and an emphasis area. Students who complete relevant special topics, travel course, or research course will consult with the department prior to enrollment in the course to determine if it fulfills a course for an emphasis area.

Other Academic Requirements

Students must achieve a grade of C or better in all course work counted for the major in biological science, and every biological science course requires a grade of C or better in all prerequisite courses, including those prerequisite courses from other departments. For example, Bisc 160 and 161 must be passed with a grade of C or better before Bisc 162 and 163 may be taken. In addition, Bisc 160, 161, 162, and 163 must be passed with a grade of C or better before any additional biological science course at the 300 level or above is attempted. Bisc 150, 206, 207, 210, 220, and 492 cannot be used toward a major in biological sciences.

Emphasis-Organismal Biology **Course Requirements**

Emphasis in Organismal Biology:

Requires a minimum of three courses from the following list:

- Bisc 300: Research Methods in Biology
- BISC 305: Science in Practice
- Bisc 310: Human Anatomy
- Bisc 318: Botany
- Bisc 327: Introductory Neuroscience
- Bisc 329: Biology of Fishes
- Bisc 330: Introductory Physiology
- Bisc 331: Comparative Anatomy of the Vertebrates
- Bisc 332: Comparative Embryology of Vertebrates
- Bisc 334: Ornithology
- Bisc 335: Human Reproduction
- Bisc 337: Introductory Entomology
- Bisc 338: Invertebrate Zoology
- Bisc 339: Phycology
- Bisc 342: Plant Diversity
- Bisc 349: Biology of Sharks and Their Relatives
- Bisc 350: Mammalogy
- BISC 352: Coastal Ecology
- Bisc 415: Vertebrate Histology
- Bisc 416: Elementary Parasitology
- Bisc 427: Methods in Comparative Neuroscience
- Bisc 502: Mycology
- Bisc 504: Biometry
- Bisc 512: Animal Behavior
- Bisc 516: Plant Physiology



- Bisc 518: Microtechnique
- Bisc 519: Physiology of Aquatic Animals
- BISC 528: Conservation Physiology
- Bisc 529: Endocrinology
- Bisc 531: Plant Morphology
- Bisc 532: Plant Taxonomy
- Bisc 533: Advanced Neuroscience
- Bisc 538: Hormones and Behavior
- Bisc 543: Functional Neuroanatomy
- Bisc 546: Herpetology
- Bisc 547: Advanced Histology
- Bisc 551: Protozoology
- Bisc 553: Comparative Animal Physiology

