

# Biology (B.S. Quantitative) at UNC



## Are you a junior transfer student interested in majoring in Biology (B.S. Quantitative) while at UNC-Chapel Hill? Here are a few helpful tips:

**Major Requirements** // If you plan to transfer with junior status and graduate two years after transferring to UNC, these are courses that we recommend be completed prior to transfer.

□ BIOL 101 & 101 Lab (Principles of Biology)

TRANSFER CHECKLIST

- □ CHEM 101 & Lab (General Descriptive Chemistry I)
- □ CHEM 102 & Lab (General Descriptive Chemistry II)
- □ CHEM 261 (Introduction to Organic Chemistry I),
- CHEM 262 & 262 Lab (Introduction to Organic Chemistry II)
- MATH 130 (Precalculus Mathematics) and/or MATH 231 (Calculus of Functions of One Variable I)
- □ STOR 155 (Introduction to Statistics)

**Major Courses** // Together with the courses listed above, these courses need to be completed in order to graduate. (Equivalent coursework completed at your previous college may fulfill these requirements.)

- Eight (8) biology courses beyond BIOL 101 (Principles of Biology), including the following:
- □ BIOL 201 (Ecology and Evolution)
- □ BIOL 202 (Molecular Biology and Genetics)
- □ BIOL 205 (Cellular and Developmental Biology)

□ One of the following: BIOL 452 (Mathematical and Computational Models in Biology), BIOL 525 (Computational Analyses and Resources in Genomics), BIOL 526 (Computational Genetics), BIOL 527 & 527 Lab (Laboratory in Quantitative Biology), BIOL 528 (Systems Biology of Genetic Regulation), BIOL 256 (Mathematical Models in Quantitative Biology)

- □ Four (4) electives (at least two (2) quantitative, and two (2) with labs)
- □ MATH 232 (Calculus of Functions of One Variable II)
- □ MATH 233 (Calculus of Functions of Several Variables)
- □ PHYS 114 (General Physics I) or PHYS 116 (Mechanics)
- PHYS 115 (General Physics II) or PHYS 117(Electromagnetism and Optics)
- COMP 116 (Introduction to Scientific Programming) or COMP 401 (Foundation of Programming)
- □ Two (2) allied science electives in addition to general education requirements

#### More information for the Biology (B.S. Quantitative) Program



Biology is the study of life from both basic and applied perspectives across a broad range of analytical levels, from the molecule and cell to the organism and ecosystem. Departmental majors gain a firm foundation in essential areas of biology through the core curriculum and have ample opportunity to specialize in animal behavior, biomechanics, botany, cell biology, developmental biology, ecology, evolutionary biology, genetics, genomics, marine biology, microbiology, molecular biology, neurobiology, organismal biology, physiology, and plant biology. There are many opportunities for mentored undergraduate research and internships. (UNC-Chapel Hill Undergraduate Bulletin, 2012-2013)



#### Important Links

. . .

Undergraduate Bulletin: unc.edu/ugradbulletin/depts/biol.html Resources for Student Success: studentsuccess.unc.edu Transfer Resources: transfers.unc.edu Summer School at UNC: summer.unc.edu What Can I Do with This Major? careers.unc.edu/students/explore-majors-and-careers



## Connect with the Biology Department on Facebook (UNC Biology Undergrads), online at bio.unc.edu or with the department's undergraduate advisor at bishemer@email.unc.edu

"Our department is considered to be a premiere department in one of the most highly ranked public universities in the nation. It was formed in 1980 by the merger of the Departments of Zoology and Botany and thus includes a remarkable diversity of disciplines in the Biological Sciences. As undergraduates, you will have the opportunity to learn from some of the top scholars in virtually any field of Biology, not only in the classroom, but in the field and in the laboratory as well." Professor and Chair, Victoria L. Bautch



