

Biology for Educators (Certificate)

The Graduate Certificate in Biology for Educators will provide additional training in biological sciences to K-12 teachers and other educators. The certificate will provide recognition to those individuals who complete 12 credit hours of coursework in graduate level biology, with the option to complete up to 18 credit hours for those interested in teaching AP courses or teaching at the community college level (dependent on individual community college credential requirements). All students will choose between four and six courses (3 credits each) in topic areas that align with their own goals, including a capstone course in the science of learning. Course topics will include animal behavior, communicable and non-communicable diseases, toxicology, evolution, genetics and microbiology. Faculty are continuing to develop new courses to increase options.

Applicants must meet at least one of these three requirements:

- have earned a bachelor's degree from an accredited college or university with minimum 3.0 GPA in the last 60 credit hours of undergraduate study
- be a graduate student in good standing in an education-related masters or doctoral program
- have earned a master's degree from an accredited college or university

In addition, applicants will be required to submit a one-page statement describing how this program will benefit their personal or professional development and career goals.

Financial aid support is not typically offered to students seeking certificates. However, we encourage prospective students to pursue the possibility of tuition reimbursement programs through their employer. Additionally, courses taken during the fall and spring terms can be paid for using the NC State payment plan (<https://studentservices.ncsu.edu/your-money/bill/pay-your-bill/enroll-in-a-payment-plan/>).

Plan Requirements

- Option One: Select 12 credits
- Option Two: Select 18 credits, gives Educators enough graduate-level courses to teach Advanced Placement (AP) classes at the high school level or to teach in community college

Code	Title	Hours
BIO 405	Functional Histology	3
BIO 424	Endocrinology	3
MB 411	Medical Microbiology	3
MB 441	Immunology	3
MB 451	Microbial Diversity	3
TOX 401	Principles of Toxicology	4
TOX 415	Environmental Toxicology and Chemistry	4
BSC 514	Studying Animal Behavior (Special Topics: Introduction to Animal Behavior)	3
BSC 546	Humans and Disease: Communicable Diseases	3
BIO 592	Topical Problems (Special Topics: Cancer Biology, Progression and Therapeutics)	3

BIO 592	Topical Problems (Special Topics: Model Organisms in Cellular and Molecular Biology)	1-3
BSC 516	Toxics, Human Health, and the Environment	3
BIO 592	Topical Problems (Genetics: Fundamental Concepts and Societal Issues)	3
BIO 592	Topical Problems (Primate Behavior)	3