Microbiology (Certificate)

The University Undergraduate Certificate in Microbiology offers students the opportunity to further their understanding of microorganisms and the roles they play in the world in which we live. The intended audience of this certificate includes degree-seeking undergraduate students at institutions where a Microbiology major or minor is not available, and non-degree students seeking additional experience in microbiology for career advancement or to enhance their applications to professional, graduate, or allied health schools. This certificate may also improve the ability of K-12 science teachers to compete for positions or teach more effectively. Finally, this certificate would provide an in-depth understanding of microbiology for those interested out of personal satisfaction.

Program Coordinator

The Certificate advisor is:

Dr. Michaela Gazdik Stofer
Certificate Coordinator
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Website

Admissions Requirements

Students apply by submitting their academic record and a letter of interest. Admission to the program is not required to take certificate courses. The requirements for admission are:

- A high school diploma (or equivalent)
- Completion of high-school level chemistry and biology
- Completion of college-level chemistry and either genetics or biochemistry courses (required as prerequisites for upper-level certificate courses) OR current enrollment in a program offering these courses OR other access to these courses
- Degree-seeking students at NCSU are not eligible (these students should enroll in the Microbiology minor)
- Students who have completed or are currently enrolled in a Microbiology degree program (including a minor) are not eligible

Academic Structure

College: College of Sciences
Term Effective: 1/2013
Plan Code: 32MBCTU
CIP Code: 26.0502
Description: Undergraduate Certificate in Microbiology
Offered: On-Campus and Distance Education formats

Plan Requirements

The Microbiology Certificate requires 12 undergraduate credit hours, as follows:

Code	Title	Hours
Required Courses		
MB 351	General Microbiology [1]	3
MB 411	Medical Microbiology [1]	3
MB 451	Microbial Diversity [1]	3
Elective Course		
Select one of the following:		3
MB 200	The Fourth Horseman: Plagues that Changed the World [1]	
MB 352	General Microbiology Laboratory	
MB 354	Inquiry-Guided Microbiology Lab	
MB 360	Scientific Inquiry in Microbiology: At the Bench	
MB 492	External Learning Experience [2]	
BSC 493	Research Experience	1-3
MB 4XX	Any 400-level Microbiology course, with prior program approval	
Total Hours		**13-15**

[1] Available via distance education.
[2] Contact instructors about possible remote instruction.

Prerequisites are required for some courses.

At least 9 credits counted toward the certificate must be taken from NCSU. A grade of C- or better ("S" is only allowed for MB 492 External Learning Experience or BSC 493 Research Experience) is required of all required or elective courses. An overall 2.0 or greater GPA in coursework taken to complete the certificate is required.

Estimated Total Credit Hours Required: 12

Plan of study: The certificate requires 12 credit hours. Students pursuing university certificate programs are considered non-degree studies (NDS) students for the purpose of university registration. Because General Microbiology is a prerequisite for Medical Microbiology, which in turn is a prerequisite for Microbial Diversity, this program will take a minimum of 3 semesters to complete if all courses are taken from NCSU.