MICROBIOLOGY - BACHELOR OF SCIENCE

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1220G College Algebra and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I [1]	4
MATH 1220G	College Algebra [1]	3
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory [1]	4
Area IV: Social and Behavioral Science Course [2]		3
Elective Course		1
	Credits	**15**
Semester 2		
MATH 1250G	Trigonometry & Pre-Calculus [1]	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors [1]	4
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
Choose from one of the following:		3
COMM 1115G	Introduction to Communication	
HNRS 2175G	Introduction to Communication Honors	
ACOM 1130G	Effective Leadership and Communication in Agriculture	
	Credits	**15**
Second Year		
Semester 1		
Choose from one of the following:		3
ENGL 2210G	Professional and Technical Communication Honors	
ENGL 2215G	Advanced Technical and Professional Communication	
MATH 1511G	Calculus and Analytic Geometry I [1]	4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors [1]	4
BIOL 311 & 311 L	General Microbiology and General Microbiology Laboratory [1]	5
	Credits	**16**
Semester 2		
BIOL 305	Principles of Genetics [1]	3
CHEM 313	Organic Chemistry I [1]	3
Area V: Humanities Course [2]		3
Choose from one of the following:		3
BIOL 455	Biometry [1]	
A ST 311	Statistical Applications [1]	
Initial Second Language Course in series		3
	Credits	**15**
Third Year		
Semester 1		
CHEM 314	Organic Chemistry II [1]	3
CHEM 315	Organic Chemistry Laboratory [1]	2
PHYS 2230G & PHYS 2230L	General Physics for Life Science I and Laboratory to General Physics for Life Science I [1]	4
BIOL 474	Immunology	3
Next Second Language Course in series [1]		3
	Credits	**15**
Semester 2		
PHYS 2240G & PHYS 2240L	General Physics for Life Science II and Laboratory to General Physics for Life Science II [1]	4
BCHE 395	Biochemistry I [1]	3
Upper-division Biology Elective (Microbiology) [1]		3
Area V: Creative and Fine Arts Course [2]		3
VWW: Viewing a Wider World Course [3]		3
	Credits	**16**
Fourth Year		
Semester 1		
BIOL 478	Molecular Biology of Microorganisms	3
Upper-division Biology Elective (Microbiology) [1]		3
VWW: Viewing a Wider World Course [3]		3
Upper-division Elective Course [1]		3
Elective Course		3
	Credits	**15**
Semester 2		
BIOL 479 & 479 L	Medical Microbiology and Medical Microbiology Laboratory [1]	4
Choose from one of the following:		3
BIOL 451	Physiology of Microorganisms [1]	
BIOL 475	Virology [1]	
Upper-division Elective Course [1]		3
Elective Course		3
	Credits	**13**
	Total Credits	**120**

1 These courses have prerequisites and/or co-requisites and it is the students responsibility for checking and fulfilling all requirements for these courses.

2 See the General Education (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/) section of the catalog for a full list of courses.

3 See the Viewing a Wider World (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext) section of the catalog for a full list of courses.