BIOLOGY - BACHELOR OF ARTS

The Bachelor of Arts curriculum is intended for students who desire a broad education with emphasis in biology in a program chosen by the student in consultation with an academic advisor. The Bachelor of Arts is recommended for those who plan to teach at the primary levels or to use a background in life science in business or other endeavors.

Requirements

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 120 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education		
Area I: Communications		*10*
English Composition - Level 1 [1]		
English Composition - Level 2 [1]		
Oral Communication [1]		
Area II: Mathematics [2]		*3-4*
MATH 1430G	Applications of Calculus I	
or MATH 1511G	Calculus and Analytic Geometry I	
Area III/IV: Laboratory Sciences and Social/Behavioral Sciences		*11*
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	
Area IV: Social/Behavioral Sciences course (3 credits) [1]		
Area V: Humanities [1]		*3*
Area VI: Creative and Fine Arts [1]		*3*
General Education Elective		
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory (Departmental Requirement)	4
Viewing a Wider World [3]		**6**
Departmental Requirements		
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
BIOL 301	Principles of Ecology	3
BIOL 305	Principles of Genetics	3
BIOL 377	Cell Biology	3
BIOL 467	Evolution	3
Biology Electives		*12*
Select sufficient upper-division biology electives to bring total upper-division credits to 24. [4]		
Non-Departmental Requirements (in addition to Gen.Ed/VWW)		
Organic Chemistry Requirement		*4-8*
CHEM 2120 & 2120L	Integrated Organic Chemistry and Biochemistry and Integrated Organic Chemistry and Biochemistry Lab	4
OR		
CHEM 313 & CHEM 314 & CHEM 315	Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory	8
Select 3-4 credits from one of the following departments: astronomy, computer science, geology or physics		*3-4*
Second Language Requirement (See below)		**0-8**
The number of credits required to satisfy this requirement will vary depending on the option a student choses.		
Electives, to bring the total credits to 120 [5]		**19-33**
Selective sufficient electives to bring the total to 120, including at least 48 upper-division credits.		
Total Credits		**120**

1. See the General Education (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/) section of the catalog for a full list of courses.
2. Either MATH 1430G Applications of Calculus I or MATH 1511G Calculus and Analytic Geometry I is required for the degree but students may need prerequisite courses before entering one of these.
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.
4. Choice of Biology electives should be done in consultation with an advisor.
5. Elective credit may vary depending on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The elective credit in the requirement list is the amount needed to bring the total to 120 credits and may vary based on the degree. Students may need to complete more or less courses on a case-by-case basis and each student should discuss this with their advisor.

Second Language Requirement

For the Bachelor of Arts in Biology there is a one year second language requirement, the options to complete this requirement are listed below. The number of credits that a student needs to take may vary depending on what level they come in with. Please speak with an advisor for more information as to which courses you will need to take to fulfill the second language requirement for this degree.

Option 1:

Prefix	Title	Credits
Complete one of the following sequences:		
FREN 1110 & FREN 1120	French I and French II	4-8
GRMN 1110 & GRMN 1120	German I and German II	4-8
JAPN 1110 & JAPN 1120	Japanese I and Japanese II	4-8
SPAN 1110 & SPAN 1120	Spanish I and Spanish II	4-8
PORT 1110 & PORT 1120	Portuguese I and Portuguese II	3-6
For Heritage Speakers:		

SPAN 1210 & SPAN 1220	Elementary Spanish for Heritage Learners I and Spanish for Heritage Learners II	3-6
or SPAN 2210	Spanish for Heritage Learners III	

Option 2:

Prefix	Title	Credits
Complete the following sequence for American Sign Language (with a C- or better):		
SIGN 1110	American Sign Language I	3
SIGN 1120	American Sign Language II	3

Option 3:

Prefix	Title	Credits
Challenge the 1120 level for the following courses:		
FREN 1120	French II	4
or PORT 1120	Portuguese II	
or SPAN 1120	Spanish II	
or SPAN 2210	Spanish for Heritage Learners III	

Option 4:

Pass a three-credit, upper-division course (numbered 300 or above) taught in a second language by the department of Languages and Linguistics.

Option 5:

Obtain college certification of completion of three years of a second language at the high school level with a grade of C- or higher in the second-year level.

Option 6:

By obtaining certification of a working knowledge of a Native American language from the American Indian program director.

Option 7:

By obtaining, from the head of the Department of Languages and Linguistics, certification of a working knowledge of a second language if such language is not taught at NMSU.

Option 8:

In the case of a foreign student who is required to take the TOEFL exam admission, the dean will automatically waive the second language requirement.

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**
MATH 1220G	College Algebra [1]	3
ENGL 1110G	Composition I [1]	4
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		3
	Credits	**17**
Semester 2		
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors [1]	4
CHEM 1121	General Supplemental Instruction I	1
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:		3-4
MATH 1430G	Applications of Calculus I [1]	
MATH 1511G	Calculus and Analytic Geometry I	
Choose from one of the following Area I Oral Communication General Education Courses:		3
COMM 1115G	Introduction to Communication	
HNRS 2175G	Introduction to Communication Honors	
ACOM 1130G	Effective Leadership and Communication in Agriculture	
	Credits	**15-16**
Second Year		
Semester 1		
ENGL 2210G	Professional and Technical Communication Honors	3
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors [1]	4
CHEM 1122	General Supplemental Instruction II	1
BIOL 305	Principles of Genetics [1]	3
Elective Course [3]		4
	Credits	**15**
Semester 2		
BIOL 377	Cell Biology [1]	3
First Course in Second Language Series		3-4
Upper-division Biology Elective Course [1]		3
Area VI: Creative and Fine Arts Course [2]		3
Area V: Humanities Course [2]		3
	Credits	**15-16**
Third Year		
Semester 1		
CHEM 313	Organic Chemistry I [1]	3
CHEM 303	Organic Supplemental Instruction I	1
Upper-division Biology Elective Course [1]		3
Next Second Language Course in Series [1]		3-4
VWW: Viewing a Wider World Course [4]		3
Elective Course [3]		2
	Credits	**15-16**
Semester 2		
CHEM 314	Organic Chemistry II	3
CHEM 315	Organic Chemistry Laboratory	2
Upper-division Biology Elective Course [1]		3
Science Elective Course with prefix ASTR, C S, GEOL or PHYS		4
Elective Course [3]		3
	Credits	**15**
Fourth Year		
Semester 1		
BIOL 301	Principles of Ecology [1]	3
Upper-division Biology Elective Course [1]		3
VWW: Viewing a Wider World Course [4]		3

Upper-division Elective Course [3]		3
Upper-division Elective Course [3]		3
	Credits	**15**
Semester 2		
BIOL 467	Evolution	3
Upper-division Elective Course [1]		3
Elective Course [3]		4
Elective Course [3]		3
	Credits	**13**
	Total Credits	**120-123**

[1] These courses have prerequisites and it is the students responsibility for checking and fulfilling all course prerequisites listed 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] Elective credit may vary depending on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The elective credit in the requirement list is the amount needed to bring the total to 120 credits and may vary based on the degree. Students may need to complete more or less courses on a case-by-case basis and each student should discuss this with their advisor.

[4] 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.