

# APPLIED AND AGRICULTURAL BIOLOGY (APPLIED BIOLOGY) - BACHELOR OF SCIENCE IN AGRICULTURE

## 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 or ENGL 1110H	Composition I <sup>1</sup> or Composition I Honors	4
MATH 1220G	College Algebra <sup>1</sup>	3
EPWS 1110 & 1110L	Applied Biology and Applied Biology Lab	4
ACES 1120	Freshman Orientation	1
Area IV: Social and Behavioral Science Course <sup>2</sup>		3
<b>Credits</b>		<b>15</b>

### Semester 2

ENGL 2210G or ENGL 2210H	Professional and Technical Communication <sup>1</sup> or Professional and Technical Communication	3
MATH 1250G	Trigonometry & Pre-Calculus <sup>1</sup>	4
BIOL 2610G	Principles of Biology: Biodiversity, Ecology, and Evolution <sup>1</sup>	3
ACOM 1130G	Effective Leadership and Communication in Agriculture	3
Area V: Humanities Course <sup>2</sup>		3
<b>Credits</b>		<b>16</b>

### Second Year

#### Semester 1

CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
BIOL 2110G	Principles of Biology: Cellular and Molecular Biology	3
BIOL 313 or BIOL 322	Structure and Function of Plants or Zoology	3
VWW: Viewing a Wider World Course <sup>3</sup>		3
Area VI: Creative and Fine Arts Course <sup>2</sup>		4
<b>Credits</b>		<b>17</b>

#### Semester 2

MATH 1511G or MATH 1511H	Calculus and Analytic Geometry I <sup>1</sup> or Calculus and Analytic Geometry I Honors	4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
BIOL 311	General Microbiology <sup>1</sup>	3
Elective Course		2
<b>Credits</b>		<b>13</b>

### Third Year

#### Semester 1

CHEM 313	Organic Chemistry I	3
A ST 311	Statistical Applications	3
EPWS 302	General Entomology	4
Choose from one of the following: <sup>1</sup>		3
ANSC 370	System Physiology of Farm Animals	
BIOL 312	Plant Taxonomy	
BIOL 354	Physiology of Humans	
BIOL 377	Cell Biology	
EPWS 314	Plant Physiology	
VWW: Viewing a Wider World Course <sup>3</sup>		3

**Credits 16**

#### Semester 2

CHEM 314 & CHEM 315	Organic Chemistry II and Organic Chemistry Laboratory <sup>1</sup>	5
EPWS 301	Agricultural Biotechnology <sup>1</sup>	3
Choose one from the following:		4
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab <sup>1</sup>	
PHYS 2230G & PHYS 2230L	General Physics for Life Science I and Laboratory to General Physics for Life Science I	
Elective Course		3

**Credits 15**

### Fourth Year

#### Semester 1

EPWS 310	Plant Pathology (Fall Only) <sup>1</sup>	4
Elective course		4
EPWS 311	Introduction to Weed Science (Fall Only) <sup>1</sup>	4
AGRO 305	Principles of Genetics <sup>1</sup>	3

**Credits 15**

#### Semester 2

EPWS 447	Seminar	1
Choose from one of the following: <sup>1</sup>		3
ANSC 370	System Physiology of Farm Animals	
BIOL 312	Plant Taxonomy	
BIOL 354	Physiology of Humans	
BIOL 377	Cell Biology	
EPWS 314	Plant Physiology	
EPWS 373	Fungal Biology	
EPWS 486	Plant Virology	
Elective Course		3
Elective Course		3
Elective Course		3

**Credits 13**

**Total Credits 120**

<sup>1</sup> These courses have prerequisites and it is the students responsibility to check and fulfill all course prerequisites listed for these courses.

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

<sup>3</sup> 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.