

# BIOLOGY, B.S. (ALTOONA)

**Begin Campus:** Any Penn State Campus

**End Campus:** Altoona

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2021-22 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contain suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

### General Biology Option: Biology, B.S. at Altoona Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
BIOL 110 <sup>*#</sup>	4 BIOL 220W or 240W <sup>*</sup>	4
CHEM 110 <sup>*#†</sup>	3 CHEM 112 <sup>*†</sup>	3
CHEM 111 <sup>†</sup>	1 CHEM 113 <sup>†</sup>	1
MATH 140B or 140 <sup>*#†</sup>	4 MATH 141	4
PSU 3	1 ENGL 15, 30H, or ESL 15 <sup>†</sup>	3
General Education Course	3	
	<b>16</b>	<b>15</b>

#### Second Year

Fall	Credits Spring	Credits
BIOL 230W <sup>*</sup>	4 BIOL 220W or 240W <sup>*</sup>	4
CHEM 210 or 202 (see adviser for alternative)	3 CHEM 212 or 203	3
STAT 200 or 250 <sup>†</sup>	4 PHYS 251	4
General Education Course	3 CAS 100 <sup>†</sup>	3
Elective Course - Supporting Course	1 General Education (GHW)	1.5
	<b>15</b>	<b>15.5</b>

#### Third Year

Fall	Credits Spring	Credits
Biology 400-level Selection (consult with an academic adviser for options)	3 Biology 400-level Selection (consult with an academic adviser for options)	3
CHEM 213 (Elective - Supporting Course)	2-4 Elective Course - Supporting Course	3
PHYS 251 or 212 <sup>†</sup>	4 PHYS 213 and PHYS 214 or Elective - Supporting Course	3 or 4
General Education Course	3 General Education Course	3
Elective Course - Supporting Course	3 Elective Course - Supporting Course	3
	<b>15-17</b>	<b>15-16</b>

#### Fourth Year

Fall	Credits Spring	Credits
Biology 400-level Selection (consult with an academic adviser for options)	3 Biology 400-level Selection (consult with an academic adviser for options)	3
Biology 400-level Selection (consult with an academic adviser for options)	3 Biology 400-level Selection (consult with an academic adviser for options)	3
General Education Course	3 General Education Course	3
ENGL 202C	3 Elective - Supporting Course	3
Elective Course - Supporting Course	3 or 4 Elective Course - Supporting Course	4
General Education Course (GHW)	1.5	
	<b>16.5-17.5</b>	<b>16</b>

#### Total Credits 124-128

- \* Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

## Vertebrate Physiology Option: Biology, B.S. at Altoona Campus

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### First Year

Fall	Credits Spring	Credits
BIOL 110 <sup>**#</sup>	4 BIOL 220W or 240W	4
CHEM 110 <sup>**†</sup>	3 CHEM 112 <sup>**†</sup>	3
CHEM 111 <sup>†</sup>	1 CHEM 113 <sup>†</sup>	1
MATH 140B or 140 <sup>**†</sup>	4 MATH 141	4
PSU 3	1 ENGL 15, 30H, or ESL 15 <sup>‡</sup>	3
General Education Course	3	
	<b>16</b>	<b>15</b>

### Second Year

Fall	Credits Spring	Credits
BIOL 230W <sup>*</sup>	4 BIOL 220W or 240W <sup>*</sup>	4
CHEM 210	3 CHEM 212	3
STAT 200 or 250	4 PHYS 251	4
General Education Course	3 CAS 100 <sup>‡</sup>	3
Elective - Supporting Course	1 General Education Course (GHW)	1.5
	Elective Course - Supporting Course	1
	<b>15</b>	<b>16.5</b>

### Third Year

Fall	Credits Spring	Credits
BIOL 472 (Biology 400-level Selection (consult with an academic adviser for options))	3 BIOL 472 (Biology 400-level Course)	3
CHEM 213	2 BIOL 473	2
PHYS 251 or 212	4 Biology 400-level Selection (consult with an academic adviser for options) or PHYS 213 and PHYS 214	3 or 4
General Education Course	3 General Education Course	3
Elective Course - Supporting Course	3 Elective Course - Supporting Course	3
	General Education Course (GHW)	1.5
	<b>15</b>	<b>15.5-16.5</b>

### Fourth Year

Fall	Credits Spring	Credits
BMB 401	3 BMB 402	3
Biology 400-level Selection (consult with an academic adviser for options)	3 Biology 400-level Selection (consult with an academic adviser for options)	3
ENGL 202C <sup>‡</sup>	3 General Education Course	3
General Education Course	3 Elective - Supporting Course	3 or 4

Elective - Supporting Course or Biology 400-level Selection (consult with an academic adviser for options)

3 or 4 Elective - Supporting Course 3

**15-16** **15-16**

### Total Credits 123-126

### University Requirements and General Education Notes:

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Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

## Ecology Option: Biology, B.S. at Altoona Campus

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### First Year

Fall	Credits Spring	Credits
BIOL 110 <sup>*#</sup>	4 BIOL 220W or 240W <sup>*</sup>	4
CHEM 110 <sup>*#†</sup>	3 CHEM 112 <sup>*†</sup>	3
CHEM 111 <sup>†</sup>	1 CHEM 113 <sup>†</sup>	1
MATH 140B or 140 <sup>*#†</sup>	4 MATH 141 <sup>†</sup>	4
PSU 3	1 ENGL 15, 30H, or ESL 15 <sup>†</sup>	3
General Education Course	3	
	<b>16</b>	<b>15</b>

### Second Year

Fall	Credits Spring	Credits
BIOL 230W <sup>*</sup>	4 BIOL 220W or 240W <sup>*</sup>	4
CHEM 210 or 202	3 CHEM 212 or 203	3
STAT 200 or 250	4 PHYS 251	4
General Education Course	3 CAS 100 <sup>‡</sup>	3
Elective Course - Supporting Course	1 General Education Course (GHW)	1.5
	<b>15</b>	<b>15.5</b>

### Third Year

Fall	Credits Spring	Credits
Biology 400-level Selection (consult with an academic adviser for options)	3 Biology 400-level Selection (consult with an academic adviser for options)	3
CHEM 213 (Elective - Supporting Course)	2-4 Biology 400-level Selection (consult with an academic adviser for options)	3
PHYS 251 or 212	4 PHYS 213 and PHYS 214 or Elective - Supporting Course	3 or 4
General Education Course	3 General Education Course	3
Elective - Supporting Course	3 Elective - Supporting Course	3
	General Education Course (GHW)	1.5
	<b>15-17</b>	<b>16.5-17.5</b>

### Fourth Year

Fall	Credits Spring	Credits
Biology 400-level Course	3 Biology 400-level Selection (consult with an academic adviser for options)	3
General Education Course	3 Biology 400-level Selection (consult with an academic adviser for options)	3
ENGL 202C <sup>‡</sup>	3 General Education Course	3
STAT 462 or 464	3 Elective - Supporting Course	3 or 4

Elective - Supporting Course	3 or 4	Elective - Supporting Course	3
	<b>15-16</b>		<b>15-16</b>

### Total Credits 123-128

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