

SCIENCE, B.S. (ABINGTON)

Begin Campus: Any Penn State Campus

End Campus: Abington

Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 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 contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

General Option: Science, B.S. at Abington 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 |
|-----------------------------|---|-------------|
| ENGL 15 or 30H (GWS) | 3 MATH 141 (GQ) [†] | 4 |
| MATH 140 (GQ) ^{*†} | 4 BIOL 240W (GN) | 4 |
| BIOL 110 (GN) ^{*†} | 4 CHEM 112 (GN) ^{*†} | 3 |
| CHEM 110 (GN) ^{*†} | 3 CHEM 113 (GN) | 1 |
| CHEM 111 (GN) [†] | 1 General Education Course | 3 |
| | General Education Health & Wellness (GHW) | 1.5 |
| | 15 | 16.5 |

Second Year

| Fall | Credits Spring | Credits |
|----------------------------------|--|-------------|
| BIOL 220W or 230W (GN) | 4 Physical, Mathematical, or Life Science Course | 3 |
| Earth and Mineral Science Course | 3 Elective | 3 |
| STAT 200 or 250 (GQ) | 3-4 PHYS 251 (GN) | 4 |
| PHYS 250 (GN) [*] | 4 ENGL 202C (GWS) | 3 |
| CAS 100A or 100B (GWS) | 3 General Education Health and Wellness (GHW) | 1.5 |
| | 17-18 | 14.5 |

Third Year

| Fall | Credits Spring | Credits |
|--|--|--------------|
| Physical, Mathematical, or Life Science Course | 3 General Education Course | 3-4 |
| 400-Level Selection | 3 General Education Course | 3 |
| Global, Social, and Personal Awareness | 3 400-Level Science [*] | 3 |
| General Education Course | 3 Teamwork and Interpersonal Communication | 3 |
| Elective | 3 Elective | 3 |
| | 15 | 15-16 |

Fourth Year

| Fall | Credits Spring | Credits |
|--------------------------------|--|-----------|
| 400-Level Science [*] | 3 Physical, Mathematical, or Life Science Course | 3 |
| 400-Level Selection | 3 400-Level Science [*] | 3 |
| General Education Course | 3 General Education Course | 3 |
| General Education Course | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
| | 15 | 15 |

Total Credits 123-125

* 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 Cultural Diversity 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.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

Disallowed Courses

Students may select free elective courses from nearly the entire range of the University's offerings. However, the following courses may NOT be used to satisfy degree requirements in the Biology major, regardless of option, not even as free electives.

BIOL 011**, 012**

BISC 001, 002, 003**, 004**

BMB 001**

CHEM 001, 003, 101, 108

CMPS 001, 100, 110

ENGL 004, 005

LL ED 005, 010

MATH 001, 002, 003, 004, 017, 018, 021, 022, 026, 030, 035, 036, 040, 041, 081, 082, 083, 110, 111, 200

MICRB 120, 121A, 121B, 150 151A, 151C, 151D, 151E, 151F, 151W

PHYS 001, 150, 151

CAS 004, 126

STAT 100

In addition, the following types of courses may NOT be used to satisfy degree requirements in the Biology major:

- Courses which are remedial in nature or which focus on reading improvement or study skills. NOTE: Only 3 credits of CHEM 017 and only 4 credits of MATH 140A may be used to satisfy degree requirements.
- Courses which substantially duplicate the subject matter covered in other completed courses taught at a comparable level.
- No more than 6 credits of ROTC and 12 credits of Independent Study (296, 496) may be used to satisfy degree requirements. Unless special permission is granted, Independent Study credit may only be used in the "Free Electives" category.
- No more than 5 credits of KINES may be used to satisfy degree requirements.
- ** On rare occasions, with adequate justification, a student may be permitted to use one or more of these courses to satisfy degree requirements. A petition must be submitted to request such an exception and will be considered on a case-by-case basis.

Life Sciences Option: Science, B.S. at Abington Campus

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First Year

| Fall | Credits Spring | Credits |
|-----------------------------|---|-------------|
| ENGL 15 or 30H (GWS) | 3 MATH 141 (GQ) [†] | 4 |
| MATH 140 (GQ) ^{*†} | 4 BIOL 240W (GN) | 4 |
| BIOL 110 (GN) ^{*†} | 4 CHEM 112 (GN) ^{*†} | 3 |
| CHEM 110 (GN) ^{*†} | 3 CHEM 113 (GN) | 1 |
| CHEM 111 (GN) [†] | 1 General Education Course | 3 |
| | General Education Health & Wellness (GHW) | 1.5 |
| | 15 | 16.5 |

Second Year

| Fall | Credits Spring | Credits |
|--|---|-------------|
| BIOL 220W or 230W (GN) | 4 CHEM 212 | 3 |
| CHEM 210 | 3 CHEM 213 | 2 |
| STAT 200, 250, MATH 250, or CMPSC 101 (GQ) | 3-4 PHYS 251 (GN) | 4 |
| PHYS 250 (GN) [*] | 4 ENGL 202C (GWS) | 3 |
| CAS 100A or 100B (GWS) | 3 Elective | 3 |
| | General Education Health and Wellness (GHW) | 1.5 |
| | 17-18 | 16.5 |

Third Year

| Fall | Credits Spring | Credits |
|--|--|-----------|
| 400-Level Science [*] | 3 General Education Course | 3 |
| 400-Level Selection | 3 General Education Course | 3 |
| Global, Social, and Personal Awareness | 4 400-Level Science [*] | 3 |
| General Education Course | 3 Teamwork and Interpersonal Communication | 4 |
| Elective | 3 Elective | 3 |
| | 16 | 16 |

Fourth Year

| Fall | Credits Spring | Credits |
|--------------------------------|----------------------------|-----------|
| 400-Level Science [*] | 3 BMB 211 or MICRB 201 | 3 |
| 400-Level Selection | 3 General Education Course | 3 |
| General Education Course | 3 General Education Course | 3 |
| Elective | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
| | 15 | 15 |

Total Credits 127-128

- * 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 Cultural Diversity 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.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

Additional Notes

Students must take ONE of the following courses: BIOL 220W (GN), BIOL 230W (GN), or BIOL 240W (GN).

Disallowed Courses

Students may select free elective courses from nearly the entire range of the University's offerings. However, the following courses may NOT be used to satisfy degree requirements in the Biology major, regardless of option, not even as free electives.

BIOL 011**, 012**

BISC 001, 002, 003**, 004**

BMB 001**

CHEM 001, 003, 101, 108

CMPSC 001, 100, 110

ENGL 004, 005

LL ED 005, 010

MATH 001, 002, 003, 004, 017, 018, 021, 022, 026, 030, 035, 036, 040, 041, 081, 082, 083, 110, 111, 200

MICRB 120, 121A, 121B, 150 151A, 151C, 151D, 151E, 151F, 151W

PHYS 001, 150, 151

CAS 004, 126

STAT 100

In addition, the following types of courses may NOT be used to satisfy degree requirements in the Biology major:

- Courses which are remedial in nature or which focus on reading improvement or study skills. NOTE: Only 3 credits of CHEM 017 and only 4 credits of MATH 140A may be used to satisfy degree requirements.
- Courses which substantially duplicate the subject matter covered in other completed courses taught at a comparable level.
- No more than 6 credits of ROTC and 12 credits of Independent Study (296, 496) may be used to satisfy degree requirements. Unless special permission is granted, Independent Study credit may only be used in the "Free Electives" category.

- No more than 5 credits of KINES may be used to satisfy degree requirements.
- ** On rare occasions, with adequate justification, a student may be permitted to use one or more of these courses to satisfy degree requirements. A petition must be submitted to request such an exception and will be considered on a case-by-case basis.

Math Option: Science, B.S. at Abington Campus

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First Year

| Fall | Credits Spring | Credits |
|-----------------------------|---|------------------|
| ENGL 15 or 30H (GWS) | 3 MATH 141 (GQ) [†] | 4 |
| MATH 140 (GQ) ^{*†} | 4 CHEM 112 (GN) ^{*†} | 3 |
| BIOL 110 (GN) ^{*†} | 4 CHEM 113 (GN) | 1 |
| CHEM 110 (GN) ^{*†} | 3 General Education Course | 3 |
| CHEM 111 (GN) [†] | 1 General Education Health & Wellness (GHW) | 1.5 |
| | MATH 220 (GQ) | 2-3 |
| | 15 | 14.5-15.5 |

Second Year

| Fall | Credits Spring | Credits |
|-----------------------------------|---|------------------|
| Earth and Mineral Science Course | 3 MATH 311W or CMPSC 360 | 3-4 |
| CMPSC 121 (GQ) | 3 CMPSC 122 | 3 |
| PHYS 250 or 211 (GN) [*] | 4 PHYS 251 or 212 (GN) | 4 |
| CAS 100A or 100B (GWS) | 3 Elective | 3 |
| MATH 230 or 251 | 4 General Education Health and Wellness (GHW) | 1.5 |
| | 17 | 14.5-15.5 |

Third Year

| Fall | Credits Spring | Credits |
|--------------------------|--|--------------|
| ENGL 202C (GWS) | 3 General Education Course or PHYS 213 (GN) or PHYS 214 (GN) | 3-4 |
| STAT 301 (GQ) | Elective | 3 |
| World Language Level 1 | 4 World Language Level 2 | 4 |
| General Education Course | 3 General Education Course | 3 |
| MATH 411 | 3 MATH 412 or 418 | 3 |
| | 13 | 16-17 |

Fourth Year

| Fall | Credits Spring | Credits |
|---------------------------------|----------------------------|-----------|
| General Education Course | 3 General Education Course | 3 |
| General Education Course | 3 Elective | 3 |
| Elective | 3 Elective | 3 |
| MATH 451 | 3 MATH 455 or 415 | 3 |
| MATH 484, 436, 449, 450, or 497 | 3 BMB 211 or MICRB 201 | 3 |
| | 15 | 15 |

Total Credits 120-123

- * Course requires a grade of C or better for the major
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