













2023 - 2024 Major Map



Biological Sciences (Biology and Society), BS




School/College: The College of Liberal Arts and Sciences
LABSCSBS

| Term 1 0 - 15 Credit Hours Critical course signified by  | Hours | Minimum Grade | Notes |
|--|-------|---------------|--|
|  BIO 181: General Biology I (SQ) | 4 | C | <ul style="list-style-type: none"> LIA 101, ASU 101, or other First-Year Seminar required of all first-year students Students transferring General Statistics (STP 226 or PSY 230) will fulfill STP 231 requirement Select your career interest area and play me3@ASU |
|  LIA 101: Student Success in The College of Liberal Arts and Sciences | 1 | | |
| CHM 113: General Chemistry I (SQ) | 4 | C | |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition | 3 | C | |
| STP 231: Statistics for Life Science (CS) | 3 | C | |
| Term hours subtotal: | 15 | | |
| Term 2 15 - 32 Credit Hours Critical course signified by  | Hours | Minimum Grade | Notes |
|  BIO 182: General Biology II (SG) | 4 | C | <ul style="list-style-type: none"> Join a student organization Create a resume & Handshake account with the Career & Professional Development Center Explore Research Opportunities Attend a Pre-Health 101 Session Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) Students transferring Calculus (MAT 270 or MAT 210) will fulfill MAT 251 requirement |
| CHM 116: General Chemistry II (SQ) | 4 | C | |
| ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition | 3 | C | |
| MAT 251: Calculus for Life Sciences (MA) | 3 | C | |
| Social-Behavioral Sciences (SB) AND Global Awareness (G) | 3 | | |
|  Complete ENG 101 OR ENG 105 OR ENG 107 course(s). | | | |
| Term hours subtotal: | 17 | | |
| Term 3 32 - 48 Credit Hours Critical course signified by  | Hours | Minimum Grade | Notes |
|  BIO 340: General Genetics | 4 | C | <ul style="list-style-type: none"> Pre-health students should take CHM 233 and CHM 237 instead of the elective in this term. See pre-health website for more information. If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following semester. It is not recommended to take more than two lab courses in a term. BIO 311 or HPS 340 will fulfill the upper-division Science and Society requirement for The College. Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) |
| BIO 311: Biology and Society OR HPS 340: Biology and Society | 3 | C | |
| Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C) | 3 | | |
| Complete 2 courses: Elective | 6 | | |
|  Complete First-Year Composition requirement. | | | |
|  Complete Mathematics (MA) requirement. | | | |
| Term hours subtotal: | 16 | | |



- Attend a [Study Abroad 101 Session](#).
- Explore [minors and certificates](#).

| Term 4 48 - 63 Credit Hours Critical course signified by  | Hours | Minimum Grade | Notes |
|---|-------|---------------|---|
|  BIO 345: Evolution | 3 | C | <ul style="list-style-type: none"> • Pre-health students should take CHM 234 and CHM 238 instead of electives in this term. See the pre-health website for more information. • If CHM 233 and 237 are taken, then CHM 234 and 238 must be taken the following semester. • Explore or pursue internship opportunities. • Meet with the Career & Professional Development Center to learn how to develop professional skills. |
| Literacy and Critical Inquiry (L) | 3 | | |
| Social-Behavioral Sciences (SB) | 3 | | |
| Complete 2 courses: | 6 | | |
| Elective | | | |
| Term hours subtotal: | 15 | | |

| Term 5 63 - 78 Credit Hours Necessary course signified by  | Hours | Minimum Grade | Notes |
|--|-------|---------------|---|
|  Upper Division History of Science Course | 3 | C | <ul style="list-style-type: none"> • Pre-health students should take PHY 111 and 113 instead of an elective this term. See the pre-health website for more information. • Students are encouraged to explore research options through BIO 307, 314, 414, plus 484, 492, or 495. • Meet with your advisor to discuss ways to maximize your remaining time at ASU (i.e. pre-health; 4+1 Masters Programs; study abroad). • Explore graduate school or full-time career opportunities. |
| Upper Division Major Biological Sciences Elective | 3 | C | |
| Science and Society Elective | 3 | C | |
| Humanities, Arts and Design (HU) AND Historical Awareness (H) | 3 | | |
| Elective | 3 | | |
| Term hours subtotal: | 15 | | |

| Term 6 78 - 93 Credit Hours Necessary course signified by  | Hours | Minimum Grade | Notes |
|--|-------|---------------|---|
|  Upper Division Bioethics Course | 3 | C | <ul style="list-style-type: none"> • Pre-health students should take PHY 112 and 114 instead of electives this term. See the pre-health website for more information. • Students are encouraged to explore research options through BIO 307, 314, 414, plus 484, 492, or 495. |
| Upper Division Major Biological Sciences Elective | 3 | C | |
| Upper Division Literacy and Critical Inquiry (L) | 3 | | |
| Complete 2 courses: | 6 | | |
| Elective | | | |
|  Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s). | | | |
| Term hours subtotal: | 15 | | |

| Term 7 93 - 106 Credit Hours Necessary course signified by  | Hours | Minimum Grade | Notes |
|--|-------|---------------|--|
|  Upper Division Environmental Ethics, Conservation and Society Course | 3 | C | <ul style="list-style-type: none"> • Meet with your advisor to verify remaining degree requirements have been met prior to Term 8. • Explore or apply for full-time career opportunities or graduate school. |
|  Upper Division Philosophy of Science Course | 3 | C | |
| Complete 2 courses: | 7 | | |
| Elective | | | |
| Term hours subtotal: | 13 | | |

| Term 8 106 - 120 Credit Hours Necessary course signified by  | Hours | Minimum Grade | Notes |
|--|-------|---------------|--|
|  Upper Division Science in Global Society Course | 3 | C | <ul style="list-style-type: none"> • Continue to apply for full-time career opportunities or graduate school. |
| Complete 2 courses: | 6 | C | |
| Upper Division Major Biological Sciences Elective | | | |

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|---|----|
| Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB) | 3 |
| Upper Division Elective | 2 |
| Term hours subtotal: | 14 |

- All students pursuing a BS or BSP degree in The College of Liberal Arts and Sciences must complete two courses from the Science and Society list found at <https://thecollege.asu.edu/resources/science-society>. At least one of the two courses must be upper-division and students must earn a C or better in the courses. Both Science and Society courses (i.e., all six credits) may count towards any major, minor, related fields, and ASU General Studies requirements.

Hide Course List(s)/Track Group(s)

| Science in Global Society Courses | Major Biological Sciences Elective Courses | Philosophy of Science Courses |
|--|--|--|
| BIO 302: Cancer--Mother of All Diseases (L) | BCH 361: Advanced Principles of Biochemistry | BIO 452: Philosophy of Biology and Medicine or HPS 452: Philosophy of Biology and Medicine |
| BIO 304: Plants and Civilization (L) or ENV 302: Plants and Civilization (L) | BIO OR HPS OR MBB OR MIC 3** Elective | HPS 314: Philosophy of Science (HU) or PHI 314: Philosophy of Science (HU) |
| MIC 314: HIV/AIDS: Science, Behavior, and Society or SSH 314: HIV/AIDS: Science, Behavior, and Society | BIO OR HPS OR MBB OR MIC 4** Elective | |
| Bioethics Courses | Environmental Ethics, Conservation and Society Courses | History of Science Courses |
| BIO 312: Bioethics (HU) | BIO 322: Conservation of Biodiversity | BIO 316: History of Biology: Conflicts and Controversies (H) or HPS 330: History of Biology: Conflicts and Controversies (H) |
| BIO 416: Biomedical Research Ethics (L) or HPS 410: Biomedical Research Ethics (L) | BIO 324: Environmental Ethics (HU) | BIO 317: History of Science II (HU & H) or HPS 323: History of Science II (HU & H) |
| | BIO 412: Conservation in Practice | BIO 318: History of Medicine (HU & H) or HPS 331: History of Medicine (HU & H) |
| | | HPS 322: History of Science I (HU & H) |

Notes:

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- Mathematics Placement Assessment score determines placement in first mathematics course.

Please keep in mind that the applicability of a specific transfer course toward an ASU degree program depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Transfer agreements that guarantee the completion of university level requirements do not necessarily meet college and major requirements. Please consult with an advisor for more information.

Total Hours: 120

Upper Division Hours: 45 minimum

Major GPA: 2.00 minimum

Cumulative GPA: 2.00 minimum

Total hrs at ASU: 30 minimum

Hrs Resident Credit for

Academic Recognition: 56 minimum

Total Community College Hrs: 64 maximum

Total College Residency Hrs: 12 minimum

General University Requirements Legend

General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

First-Year Composition

General Studies designations listed next to courses on the major map were valid for the 2023 - 2024 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.