














2022 - 2023 Major Map



Biological Sciences (Biology and Society), BS

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



Term 1 - A 0 - 8 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 ASU 101-LA: The ASU Experience	1		<ul style="list-style-type: none"> ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students
 BIO 181: General Biology I (SQ)	4	C	
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Term hours subtotal:	8		
Term 1 - B 8 - 15 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 182: General Biology II (SG)	4	C	<ul style="list-style-type: none"> View ASU Online first-year student registration information here. Create a resume and Handshake account with the Career & Professional Development Center to explore research or internship opportunities. Explore extracurriculars (i.e. service learning, community service, internships, research, student involvement, shadowing, etc.) Join a student organization.
ENG 101 or ENG 102: First-Year Composition OR			
ENG 105: Advanced First-Year Composition OR	3	C	
ENG 107 or ENG 108: First-Year Composition			
Term hours subtotal:	7		
Term 2 - A 15 - 22 Credit Hours	Hours	Minimum Grade	Notes
CHM 113: General Chemistry I (SQ)	4	C	<ul style="list-style-type: none"> Select your career interest area and play me3@ASU. Students transferring General Statistics (STP 226 or PSY 230) will fulfill STP 231 requirement.
STP 231: Statistics for Life Science (CS)	3	C	
Term hours subtotal:	7		
Term 2 - B 22 - 29 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
CHM 116: General Chemistry II (SQ)	4	C	<ul style="list-style-type: none"> If interested in health-related professional programs, research the timeline for admissions preparation and general admission requirements. 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.
MAT 251: Calculus for Life Sciences (MA)	3	C	
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	7		

Term 3 - A 29 - 35 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 311: Biology and Society OR HPS 340: Biology and Society	3	C	<ul style="list-style-type: none"> Due to lower-division prerequisites, pre-health students are encouraged to choose upper division General Studies (HU or SB) and The College Science and Society courses. It is not recommended to take more than two lab courses in a term. Review the Career Guide for ASU Online students to learn about available career planning resources.
Social-Behavioral Sciences (SB) AND Global Awareness (G)	3		
Term hours subtotal:	6		



Term 3 - B 35 - 42 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 340: General Genetics	4	C	<ul style="list-style-type: none"> Meet with the Career & Professional Development Center to learn how to develop professional skills
Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)	3		
 Complete First-Year Composition requirement.			
 Complete Mathematics (MA) requirement.			
Term hours subtotal:	7		

Term 4 - A 42 - 48 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 345: Evolution	3	C	<ul style="list-style-type: none"> Develop your professional online presence.
Elective	3		
Term hours subtotal:	6		

Term 4 - B 48 - 54 Credit Hours	Hours	Minimum Grade	Notes
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Elective	3		
Term hours subtotal:	6		

Term 5 - A 54 - 60 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 Upper Division Science in Contemporary Society Interface Course	3	C	<ul style="list-style-type: none"> If interested in health-related professional programs, use ASU's Health Professions Advising to prepare for application. 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 Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Term hours subtotal:	6		

Term 5 - B 60 - 66 Credit Hours	Hours	Minimum Grade	Notes
Science and Society Elective	3	C	<ul style="list-style-type: none"> Network in your career interest area.
Social-Behavioral Sciences (SB)	3		
Term hours subtotal:	6		

Term 6 - A 66 - 73 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 BIO 307: Research Colloquium: Identifying a Research Question	1	C	<ul style="list-style-type: none"> Work with your academic advisor to align your additional major requirement and
Literacy and Critical Inquiry (L)	3		

Elective	3
Term hours subtotal:	7

- major elective courses with your career aspirations
- Use **Handshake** to research employment opportunities

Term 6 - B 73 - 80 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
BIO 314: Research Colloquium in Biology and Society I	1	C	
Upper Division Additional Major Core Elective Courses	3	C	
Upper Division Literacy and Critical Inquiry (L)	3		
★ Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	7		

Term 7 - A 80 - 87 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ BIO 484: Internship OR BIO 495: Undergraduate Research	1	C	
★ Upper Division Major Biological Sciences Elective	3	C	
Elective	3		
Term hours subtotal:	7		<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

Term 7 - B 87 - 93 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Ethics Interface Course	3	C	
Elective	3		
Term hours subtotal:	6		

Term 8 - A 93 - 100 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Major Biological Sciences Elective	3	C	
Upper Division Elective	1		
Elective	3		
Term hours subtotal:	7		<ul style="list-style-type: none"> • Explore other resources available through ASU's Career and Professional Development Center

Term 8 - B 100 - 107 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Major Biological Sciences Elective	3	C	
BIO 414: Research Colloquium in Biology and Society II	1	C	
Elective	3		
Term hours subtotal:	7		<ul style="list-style-type: none"> • Gather professional references

Term 9 - A 107 - 114 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division Major Biological Sciences Elective	3	C	
Elective	4		
Term hours subtotal:	7		

Term 9 - B 114 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
★ Upper Division History and Philosophy of Science Interface Course	3	C	
Elective	3		
Term hours subtotal:	6		<ul style="list-style-type: none"> • Continue to apply for full-time career opportunities or graduate school

- 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 Contemporary Society Interface Courses	Major Biological Sciences Elective Courses	Additional Major Core Elective Courses
ASB 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) & G)	BCH 361: Advanced Principles of Biochemistry	ASB 353: Death and Dying in Cross-Cultural Perspective ((HU or SB) & G)
ASM 345: Disease and Human Evolution	BIO OR HPS 3** Elective	ASB 357: Society, Drugs and Health (SB & G)
BIO 304: Plants and Civilization (L) or ENV 302: Plants and Civilization (L)	BIO OR HPS 4** Elective	ASM 345: Disease and Human Evolution
BIO 317: History of Science II (HU & H) or HPS 323: History of Science II (HU & H)		BIO 304: Plants and Civilization (L) or ENV 302: Plants and Civilization (L)
BIO 322: Conservation of Biodiversity		BIO 312: Bioethics (HU) or PHI 320: Bioethics (HU)
BIO 412: Conservation in Practice or SOS 412: Conservation in Practice		BIO 316: History of Biology: Conflicts and Controversies (H) or HPS 330: History of Biology: Conflicts and Controversies (H)
MIC 314: HIV/AIDS: Science, Behavior, and Society or SSH 314: HIV/AIDS: Science, Behavior, and Society		BIO 322: Conservation of Biodiversity
		BIO 324: Environmental Ethics (HU) or PHI 310: Environmental Ethics (HU)
		BIO 412: Conservation in Practice or SOS 412: Conservation in Practice
		BIO 416: Biomedical Research Ethics (L) or HPS 410: Biomedical Research Ethics (L)
		HPS 314: Philosophy of Science (HU) or PHI 314: Philosophy of Science (HU)
		HPS 323: History of Science II (HU & H) or BIO 317: History of Science II (HU & H)
		HPS 331: History of Medicine (HU & H) or BIO 318: History of Medicine (HU & H)
		MIC 314: HIV/AIDS: Science, Behavior, and Society or SSH 314: HIV/AIDS: Science, Behavior, and Society
History and Philosophy of Science Interface Courses	Ethics Interface Courses	
ASB 357: Society, Drugs and Health (SB & G)	BIO 312: Bioethics (HU) or PHI 320: Bioethics (HU)	
BIO 316: History of Biology: Conflicts and Controversies (H) or HPS 330: History of Biology: Conflicts and Controversies (H)	BIO 324: Environmental Ethics (HU) or PHI 310: Environmental Ethics (HU)	
HPS 314: Philosophy of Science (HU) or PHI 314: Philosophy of Science (HU)	BIO 416: Biomedical Research Ethics (L) or HPS 410: Biomedical Research Ethics (L)	

HPS 323: History of Science II (HU & H) or
BIO 317: History of Science II (HU & H)

HPS 331: History of Medicine (HU & H) or
BIO 318: History of Medicine (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 2022 - 2023 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.