










2019 - 2020 Major Map



Applied Biological Sciences, BS



School/College: College of Integrative Sciences and Arts
TSABSABS



Term 1 0 - 14 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 BIO 181: General Biology I (SQ)	4	C	<ul style="list-style-type: none"> An SAT, ACT, Accuplacer, IELTS or TOEFL score determines placement into first-year composition courses Mathematics Placement Assessment score determines placement in mathematics course ASU 101 or college-specific equivalent First-Year Seminar required of all freshman students Select your Career Interest Communities and play me3@ASU.
ASU 101-UC: The ASU Experience	1		
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 210: Brief Calculus (MA) OR MAT 251: Calculus for Life Sciences (MA)	3	C	
Social-Behavioral Sciences (SB)	3		
Term hours subtotal:		14	




Term 2 14 - 28 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 club or professional organization.
 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	
Humanities, Arts and Design (HU)	3		
 Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:		14	

Term 3 28 - 42 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 116: General Chemistry II (SQ)	4	C	<ul style="list-style-type: none"> Students considering graduate school or health professions should complete the PHY 111/113 and PHY 112/114 sequence. All other students will complete PHY 101 and elective hours. Secure a part-time job or volunteer experience.
PHY 101: Introduction to Physics (SQ) OR PHY 111: General Physics (SQ) AND PHY 113: General Physics Laboratory (SQ)	4	C	
Applied Biological Sciences Track	3	C	
Humanities, Arts and Design (HU)	3		
 Complete Mathematics (MA) requirement.			
Term hours subtotal:		14	

Term 4 42 - 58 Credit Hours Critical course signified by 	Hours	Minimum Grade	Notes
 CHM 231: Elementary Organic Chemistry (SQ) AND CHM 235: Elementary Organic Chemistry Laboratory (SQ) OR CHM 233: General Organic Chemistry I AND CHM 237: General Organic Chemistry Laboratory I	4	C	<ul style="list-style-type: none"> Students considering graduate school or health professions should complete the following: CHM 233 and CHM 237, and CHM 234 and CHM 238 (instead of CHM 231 and CHM 235). Students considering graduate school or health professions should complete PHY 112 and 114 in term 4 as part of their electives.
Literacy and Critical Inquiry (L)	3		
Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)	3		
Complete 2 courses: Elective	6		
Term hours subtotal:	16		

Term 5 58 - 74 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 ABS 370: Ecology	3	C	<ul style="list-style-type: none"> Build your professional connections -- join the ASU Mentor Network. Students considering graduate school or health professions should complete CHM 234 and CHM 238 as part of their electives in this term.
Applied Biological Sciences Track	3	C	
Upper Division Humanities, Arts and Design (HU) AND Historical Awareness (H) OR Upper Division Social-Behavioral Sciences (SB) AND Historical Awareness (H)	3		
Complete 2 courses: Elective	7		
Term hours subtotal:	16		

Term 6 74 - 87 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 BIO 360: Animal Physiology OR ABS 314: Applied Plant Physiology OR ABS 311: Molecular and Cellular Biology	3	C	<ul style="list-style-type: none"> Use Handshake to research employment opportunities.
Upper Division Applied Biological Sciences Track	3	C	
Global Awareness (G)	3		
Elective	4		
Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	13		

Term 7 87 - 104 Credit Hours Necessary course signified by 	Hours	Minimum Grade	Notes
 ABS 350: Applied Statistics (CS) OR STP 420: Introductory Applied Statistics (CS)	3	C	<ul style="list-style-type: none"> Gather professional references. Apply for full-time career opportunities.
 ABS 490: Applied Biological Sciences Seminar	1	C	

★ BIO 340: General Genetics	4	C
★ Upper Division Applied Biological Sciences Track	3	C
Upper Division Literacy and Critical Inquiry (L)	3	
Upper Division Elective	3	
Term hours subtotal:	17	

Term 8 104 - 120 Credit Hours Necessary course signified by ★	Hours	Minimum Grade	Notes
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★ Complete 2 courses: Upper Division Applied Biological Sciences Track	6	C	
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Complete 3 courses: Upper Division Elective	10		
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Term hours subtotal: 16

- Students select one of two Applied Biological Sciences Tracks and complete 18 hours from within that track.

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

Applied Biological Sciences Health Track	Applied Biological Sciences General Biology Track
ABS 302: Ethical and Policy Issues in Biology	ABS Elective
ABS 312: Structure and Function	BIO Elective
ABS 318: Unseen Life on Earth	BCH Elective
ABS 355: Ecology and Adaptations of Vertebrates	MIC Elective
ABS 394: Food and Human Health	
ABS 394: Medicine and Culture	
ABS 417: Comparative Immunology	
ABS 484: Internship	
ABS 494: Anatomy Practicum	
ABS 494: Emerging Infections & Epidemics	
ABS 494: Natural Products & Drug Discovery	
BCH 361: Advanced Principles of Biochemistry AND BCH 367: Elementary Biochemistry Laboratory	
BIO 201: Human Anatomy and Physiology I (SG)	
BIO 202: Human Anatomy and Physiology II (SG)	
BIO 351: Developmental Biology	

Notes:

Students must complete a minimum of 12 credit hours of science courses offered by the College of Integrative Sciences and Arts. Select from ABS, CHM, BIO, PHY, and MIC prefixes.

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

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 2019 - 2020 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.