

BACHELOR OF ARTS IN GENERAL BIOLOGY ROADMAP

120 Total Units Required

Minimum Number of Units in the Major: 58

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

Course	Title	Units
First Semester		
BIOL 231	Advising for Success as a Biology Major (Major Lower-Division Core)	1
CHEM 115	General Chemistry I (Major Lower-Division Core)	4
ENG 114	Writing the First Year: Finding Your Voice (A2) ¹	3
Select One (Major Lower-Division Core, B4): ²		4
MATH 199	Pre-Calculus	
MATH 226	Calculus I	
GE Area A ³		3
		Units 15
Second Semester		
BIOL 230	Introductory Biology I (Major Lower-Division Core)	5
PHYS 111 & PHYS 112	General Physics I and General Physics I Laboratory (Major Lower-Division Core, B1, B3)	4
Select One:		3
CHEM 215	General Chemistry II (hidden prereq for CHEM 233)	
SF State Studies or University Elective ⁴		
GE Area E		3
		Units 15
Third Semester		
BIOL 240	Introductory Biology II (Major Lower-Division Core) ⁵	5
Select One (Lower-Division Core):		3
CHEM 130	General Organic Chemistry	
CHEM 233	Organic Chemistry I	
GE Area A		3
GE Area C		3

Complementary Studies or SF State Studies or University Elective ⁴		2
		Units 16
Fourth Semester		
BIOL 355	Genetics (Major Upper-Division Core)	3
GE Area C - Take Two		6
GE Area D - Take Two		6
		Units 15
Fifth Semester		
BIOL 337	Evolution (Major Upper-Division Core)	3
Physiology or Cell Biology (http://bulletin.sfsu.edu/colleges/science-engineering/biology/ba-general-biology/#degreerequirementstext)		3-4
Physiology or Cell Biology Laboratory (http://bulletin.sfsu.edu/colleges/science-engineering/biology/ba-general-biology/#degreerequirementstext)		1-4
GE Area F [±]		3
SF State Studies or University Elective ⁴		3
		Units 13-17
Sixth Semester		
Ecology, Evolution, or Organismal Biology - Take Two (http://bulletin.sfsu.edu/colleges/science-engineering/biology/ba-general-biology/#degreerequirementstext)		6-9
GE Area UD-C: Upper-Division Arts and/or Humanities		3
U.S. and California Government (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/#usg)		3
SF State Studies or University Elective (if needed)		0-3
		Units 15-18
Seventh Semester		
Upper-Division Electives (http://bulletin.sfsu.edu/colleges/science-engineering/biology/ba-general-biology/#degreerequirementstext)		4
GE Area UD-D: Upper-Division Social Sciences		3
SF State Studies or University Elective - Take Three ⁴		9
		Units 16
Eighth Semester		
Upper-Division Electives - Take as needed (http://bulletin.sfsu.edu/colleges/science-engineering/biology/ba-general-biology/#degreerequirementstext)		3-12
SF State Studies or University Elective - Take as needed ⁴		3-12
		Units 15
		Total Units 120-127

¹ ENG 114 can only be taken if you complete Directed Self-Placement (DSP) and select ENG 114; if you choose ENG 104/ENG 105 through DSP you will satisfy A2 upon successful completion of ENG 105 in the second semester; multilingual students may be advised into alternative English courses.

² To determine the best B4 course option, students should complete the online advising activity at mathadvising.sfsu.edu (<https://mathadvising.sfsu.edu/>). Questions? Contact Gator Smart Start. (<https://gatorsmartstart.sfsu.edu/>)

³ To avoid taking additional units, it is recommended that you meet the **SF State Studies** (AERM, GP, ES, SJ) requirements within your GE or major.

⁴ **Complementary Studies**

Students in the B.A. Biology program will satisfy the Complementary Studies Requirement with the completion of courses in chemistry, physics, and mathematics that are required for the major.

⁵ GE Area B2 (Life Science) is satisfied upon completion of BIOL 240.

* Students must complete at least one GVAR course in order to graduate.

± Given catalog rights, fall 2023 transfer students do not need to complete an Area F course.