

Biology

Academic Planning Worksheet 2024-2025

Simmons University

Office of Undergraduate Advising

Notes

- **Students are required to complete 60 credit hours for the Biology major, or 62 credit hours for the Environmental Science Track of the Biology major.**
- Simmons requires that all undergraduates complete a minimum of 128 credits of coursework, fulfill PLAN and major/program requirements, and submit a Senior Audit form to graduate.
- All Students are required to complete a capstone before graduating. Consult with your advisor on how best to fill this requirement.
- You may declare a major in the beginning of the first year fall semester. You must declare a major prior to earning 80 credits.
- Students who plan to apply to graduate programs in Biology (including medical/dental/veterinary school) should review Academic Planning worksheets for those Pre-Health tracks and contact their Faculty advisor or the Pre-Health Advisor for additional requirements.
- Students interested in medical or dental school or in pursuing graduate study in certain areas of biology should plan to include additional courses in Math 121- Calculus II and a year of Physics.
- **BIOL 245 and BIOL 322 are offered every other year. Take care to plan this sequence.**

Biology Major Course Requirements

First Year

Course #	Course Title	Credits	Completed
BIOL 113	General Biology (Fall or Spring)	4	
BIOL 218	General Biology II- Organismal Diversity in the Environment (Spring)	4	
CHEM 113	General & Quantitative Chemistry I (Fall)	4	
CHEM 216	General & Quantitative Chemistry II (Spring)	4	
STAT 118 (or higher) or MATH 120 (or higher)	Intro to Statistics (Fall or Spring) or Calculus I (Fall or Spring)	4	

Sophomore Year

Course #	Course Title	Credits	Completed
BIOL 222	Animal Physiology (Fall)	4	
BIOL 225	Cell Biology (Spring)	4	
CHEM 224	Organic Chemistry I (Fall)	4	
CHEM 225	Organic Chemistry II (Spring)	4	

Junior Year

Course #	Course Title	Credits	Completed
BIOL 336	Genetics (Fall)	4	

Biology Major, Environmental Science Track- Course Requirements

First Year

Course #	Course Title	Credits	Completed
BIOL 113	General Biology (Fall or Spring)	4	
BIOL 218	General Biology II- Organismal Diversity in the Environment (Spring)	4	
CHEM 111 or CHEM 113	Principles of General Chemistry or General & Quantitative Chemistry I (Fall)	4	
CHEM 112	Principles of Organic Chemistry (Spring)	4	
STAT 118 (or higher)	Intro to Statistics (Fall or Spring)	4	

Sophomore Year

Course #	Course Title	Credits	Completed
BIOL 104	Introduction to Environmental Science	4	
BIOL 225	Cell Biology (Spring)	4	
BIOL 245	Ecology (Fall – every other year)	4	

Junior Year

Course #	Course Title	Credits	Completed
BIOL222	Animal Physiology (Fall)	4	
BIOL 322	Evolution (Fall – every other year)	4	
ENVI 200	Environmental Forum (Spring)	2	

Major Electives

(Needed for the standard Biology major and Biology major with Environmental Science track)

THREE more Biology Courses (two courses must be at the 300-level; the third may be at 200- or 300-level).

Courses Selected	Credits	Completed
	4	
	4	
	4	

- BIOL 221 Microbiology
- BIOL 231 Anatomy & Physiology I
- BIOL 232 Anatomy & Physiology II
- BIOL 233 Strength and Conditioning (Spring Even Years)
- BIOL 246 Foundations of Exercise and Health
- BIOL 322 Evolutionary Biology (Fall Odd Years)
- BIOL 331 Immunobiology (Spring Even Years)
- BIOL 332 Exercise Physiology
- BIOL 333 Marine Biology (Fall Even Years)

- BIOL 334 Neurobiology with Lab (Spring Even Years)
- BIOL 335 Stem Cells, Regeneration, and Developmental Biology with Lab (Spring Odd Years)
- BIOL 338 Microbial Pathogenesis (Spring Odd Years)
- BIOL 339 Special Topics
- BIOL 347 Human Development and Genetics (Fall Odd Years)
- BIOL 362 Kinesiology

Capstone

(Needed for the standard Biology major and Biology major with Environmental Science track)

Complete 8 credit hours to fulfill the Capstone Requirement in Biology (BIOL 350, BIOL 355 and BIOL 370).

Course Selected	Credits	Completed

PLAN Requirements

The Simmons PLAN is the undergraduate general education program. Some PLAN courses may be fulfilled with required major courses. Additional PLAN requirements may be fulfilled through electives, courses in minors, or other course offerings. Work closely with advisor(s) to choose courses.

Notes:

- [KCA, KSA, Honorific Courses - Master List](#) (beginning Fall 2024)
- A course can satisfy only **one** KCA **or** KSA: Students cannot count one course for two different PLAN requirements.
- Students are allowed to take each of the three required KCAs in their major, if they wish.
- At least two KSAs must be taken outside of the major.
- Any given course will satisfy only the specific KCA or KSA designation it holds at the time it is taken by the student.

General Education PLAN Requirements	Year	Completed
Math: 1) Prior to first year, pass Math Placement Exam or 2) In first year, enroll in MATH 101 (4 credits)	Summer/ Year One	
Writing Boston (4 credits)	Year One	
SIM 100: Simmons Course: Explore (2 credits)		
SIM 200: Simmons Course: Extend (2 credits)	Year Two or Three	

PLAN Key Content Area Courses (KCA)	Courses Used to Fulfill	Completed
Aesthetic, Literary and Artistic (ALA)		
Global Historical (GH)		
Scientific Inquiry (SCI)	BIOL 113	

PLAN Key Skills Area Courses (KSA)	Courses Used to Fulfill	Completed
Diversity, Equity, Inclusion, Justice (DEIJ)		
Integrative Learning (IL)		
Leadership (LDR)		
Quantitative Literacy (QL)	STAT 118 (or higher) or MATH 120 (or higher)	
Writing-Intensive (WI)		