

2018-19 GENETICS
College of Liberal Arts and Sciences
Iowa State University

Students must fulfill all area requirements and have **120** credits to graduate. This is a suggested plan of study. Students may need to deviate from this plan to satisfy unmet requirements or to add a minor/double major. We **strongly encourage** student involvement in internships, study abroad, or research opportunities at ISU. These will enhance the program of study but may add credits or time to the degree plan. **Courses in bold are standard choices for that semester.** Please visit the Undergraduate Genetics Major website for details.

<http://undergrad.genetics.iastate.edu/information-current-genetics-majors>

Semester 1 Fall		FRESHMAN YEAR		Semester 2 Spring	
Gen 110 – Introduction to Genetics	1		Biology 211 & L – Principles of Biology I & L	4	
Biology 212 & L – Principles of Biology II & L	4		Chemistry 178 & L – General Chemistry II & L	4	
Chemistry 177 & L – General Chemistry I & L	5		Math/Stat choice or Humanities Choice	3-4	
Math/Stat choice or Humanities Choice	3-4		English 250 or Social Sciences Choice	3	
English 150 or 250- Composition I or II	3		Lib 160 – Library (or Semester 1 with 250)	1	
Lib 160 if taking English 250	1		Consider Research	0-2	
	17-18			15-16	

Semester 3 Fall		SOPHOMORE YEAR		Semester 4 Spring	
Biology 313 & L – Principles of Genetics	4		Biology 314 – Principles of Cell Biology	3	
Chemistry 331 & L – Organic Chemistry I & Lab	4		Chemistry 332 & L – Organic Chemistry II & Lab	4	
Social Sciences Choice	3		MICRO 302 (recommended), BIOL 315, or Bioinformatics/Genomics Choice	3	
Math/Stat Choice	3-4		Math/Stat Choice or Social Sciences	3 -4	
			Humanities Choice	3	
	14-15			16 -17	

Summer: Consider Internship, Study Abroad

Semester 5 Fall		JUNIOR YEAR		Semester 6 Spring	
Genetics 409 or 410	3		Genetics 409 or 410	3	
*Physics 111 or 221 – Physics I	5		*Physics 112 or 222– Physics II	5	
*BBMB 404 – Biochemistry I	3		*BBMB 405 – Biochemistry II	3	
MICRO 302, BIOL 315, or Bioinformatics/Genomics Choice	3		MICRO 302, BIOL 315, or Bioinformatics/Genomics Choice	3	
U.S. Diversity/Social Sciences Choice	3		Genetics 491 – Seminar (or semester 5)	1	
	17			15	

*Summer: *Students taking the MCAT need to have completed Biochemistry and Physics by this time. Others can complete Senior year.*

Semester 7 Fall		SENIOR YEAR		Semester 8 Spring	
Genetics 462 – Evolutionary Genetics	3		Advanced Science Elective(s)	3-6	
Advanced Science Elective or Statistics 301	3-4		International Perspective/Humanities	3	
Humanities/Science Bridge	3		Elective or Statistics 301	3-4	
Advanced Writing (Engl 302-316)	3		Social Sciences Choice or Elective	3	
Electives	0-3				
	15-16			12-16	