

2015-16 GENETICS
College of Agriculture and Life 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 212 & L – Principles of Biology II & L 4
Biology 211 & L – Principles of Biology I & 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
Speech Communications 212	3		Microbiology 302 or Biology 315 3
Math/Stat Choice or Social Sciences	3-4		Math/Stat Choice or Social Sciences 3 -4
			Ethics 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
Advanced Science Elective (e.g. Gen 499)	3		Biology 315 or Microbiology 302 3
U.S. Diversity/Social Sciences Choice	3		Genetics 491 – Seminar 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 3
Elective or Statistics 301	3-4		International Perspective/Humanities 3
Advanced Writing (Engl 302-316)	3		Elective(s) 0-9
Environmental Awareness Course (e.g. Biol 312)	3-4		
	12-14		12-15