2013-2014

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. Please visit the Undergraduate Genetics Major website for details. http://www.public.iastate.edu/~ugradgen/currentHome.shtml

FRESHMAN YEAR

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

SOPHOMORE YEAR

Semester 3 Fall			Semester 4 Spring	
Biology 313 – Principles of Genetics	3		Speech 212 – Speech Communication	3
Biology 313L – Principles of Genetics Lab	1		Biology 314 – Principles of Cell Biol	3
Chemistry 331 – Organic Chemistry	3		Chemistry 332 – Organic Chemistry	3
Chemistry 331L – Organic Chemistry Lab	1		Chemistry 332L – Organic Chemistry Lab	1
U.S. Diversity/Social Sciences Choice	3		Microbiology 302	3
Math/Stat Choice	3-4		Math/Stat Choice or Social Sciences	3
	14-15			**16**

Summer: Consider Internship, Study Abroad

JUNIOR YEAR

Semester 5 Fall			Semester 6 Spring	
Genetics 409 – Molecular Genetics	3		Genetics 410 – Analytical Genetics	3
Physics 111 – General Physics I	5		Physics 112 – General Physics II	5
Biology 312 - Ecology	4		Biology 315 – Evolution	3
Advanced Writing (Engl 302-316)	3		International Perspective/Humanities	3
Elective	0-3		Genetics 491 – Seminar	1
	15-18			**15**

Consider Research with Faculty

SENIOR YEAR

Semester 7 Fall			Semester 8 Spring	
Advanced Science Elective, e.g. Gen 490R	3		Elective	0-6
Elective or Statistics 301	3-4		Elective or Statistics 301	3-4
BBMB 404 – Biochemistry I	3		BBMB 405 – Biochemistry II	3
Ethics Choice	3		Social Sciences Choice or Elective	3
Genetics 462 – Evolutionary Genetics	3		Advanced Science Elective	3
	15-16			**12-16**