

**2015-16**  
**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	
<b>Gen 110 – Introduction to Genetics</b>	<b>1</b>		<b>Biology 212 &amp; L – Principles of Biology II &amp; L</b>	<b>4</b>	
<b>Biology 211 &amp; L – Principles of Biology I &amp; L</b>	<b>4</b>		<b>Chemistry 178 &amp; L – General Chemistry II &amp; L</b>	<b>4</b>	
<b>Chemistry 177 &amp; L – General Chemistry I &amp; L</b>	<b>5</b>		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	
	<b>17-18</b>			<b>15-16</b>	

Semester 3 Fall		SOPHOMORE YEAR		Semester 4 Spring	
<b>Biology 313 &amp; L – Principles of Genetics</b>	<b>4</b>		<b>Biology 314 – Principles of Cell Biology</b>	<b>3</b>	
<b>Chemistry 331 &amp; L – Organic Chemistry I &amp; Lab</b>	<b>4</b>		<b>Chemistry 332 &amp; L – Organic Chemistry II &amp; Lab</b>	<b>4</b>	
Social Sciences Choice	3		<b>Microbiology 302 or Biology 315</b>	<b>3</b>	
Math/Stat Choice	3-4		Math/Stat Choice or Social Sciences	3 -4	
			Humanities Choice	3	
	<b>14-15</b>			<b>16 -17</b>	

*Summer: Consider Internship, Study Abroad*

Semester 5 Fall		JUNIOR YEAR		Semester 6 Spring	
<b>Genetics 409 or 410</b>	<b>3</b>		<b>Genetics 410 or 410</b>	<b>3</b>	
<b>*Physics 111 or 221 – Physics I</b>	<b>5</b>		<b>*Physics 112 or 222– Physics II</b>	<b>5</b>	
<b>*BBMB 404 – Biochemistry I</b>	<b>3</b>		<b>*BBMB 405 – Biochemistry II</b>	<b>3</b>	
Advanced Science Elective, e.g. Gen 499	3		<b>Biology 315 or Microbiology 302</b>	<b>3</b>	
U.S. Diversity/Social Sciences Choice	3		Genetics 491 – Seminar	1	
	<b>17</b>			<b>15</b>	

*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	
<b>Genetics 462 – Evolutionary Genetics</b>	<b>3</b>		Advanced Science Elective	3	
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		Elective(s)	0-6	
	<b>15-16</b>			<b>12-16</b>	

