

**Genetics Transfer Plan, College of Agriculture and Life Sciences  
Equivalency with Southeastern Iowa Community College**

**First Semester**

Course Title (SEICC)	SEICC	ISU	Credits
English Composition I	ENG 105	ENGL 150	3
Principles of Biology I	BIO 112	BIOL 211	3
Principles of Biology Lab		BIOL 211L	1
College Chemistry I	CHM 165	CHEM 177	3
Inorganic Chemistry I Lab		CHEM 177L	1
Statistics for Business and Social Sciences	MAT 156	STAT 104	3
<b>OR</b> Differential Calculus	MAT 210	MATH 165	<u>4</u>
			14-15

**Second Semester**

Course Title (SEICC)	SEICC	ISU	Credits
English Composition II	ENG 106	ENGL 250	3
Principles of Biology II	BIO 113	BIOL 212	3
Principles of Biology Lab		BIOL 212L	1
College Chemistry II	CHM 175	CHEM 178	3
College Chemistry II Lab		CHEM 178L	1
Humanities or Social Science	See details below		3
<b>OR</b> Integral Calculus	MAT 216	MATH 166	<u>4</u>
			13-14

**Third Semester**

Course Title (SEICC)	SEICC	ISU	Credits
Humanities or Social Science	See details below		3
General Physics I	PHY 160	PHYS 111	5
Organic Chemistry I	CHM 263	CHEM 331	4
Organic Chemistry I Lab		CHEM 331L	1
Fundamentals of Speech	SPC112	SP CM 212	<u>3</u>
			16

**Fourth Semester**

Course Title (SEICC)	SEICC	ISU	Credits
Introduction to Ethics Course	PHI 105	PHIL 230	3
General Physics II	PHY 161	PHYS 112	5
Organic Chemistry II	CHM 273	CHEM 332	4
Organic Chemistry II Lab		CHEM 332L	1
International Perspective	See details below		<u>3</u>
			16

The Genetics major requires completion of two semesters **with labs** of each of the following sciences: **General Biology, General Chemistry, Organic Chemistry, and Physics**. At ISU, the labs are included in Phys 111/112 while the Biology and Chemistry labs are designated as "L". Two credit organic chemistry labs transfer as Chem 333L and 334L which will be substituted for the one credit 331L and 332L required by the major. The Genetics major also requires completion of **either two semesters of Calculus and one semester of Statistics or two semesters of Statistics (one at the 300 level) and one semester of Calculus**.

**Students should plan to take both semesters of any two-semester sequence of courses at the same institution** because each institution distributes the course material differently between

courses in a sequence. **Students taking Biology at SEICC must take both BIO 112 and 113 to receive credits for Biology 211/L and 212/L.** When taken singly, the courses are not equivalent, however when taken as a series the courses are deemed equivalent to 211/212.

This transfer plan differs from what ISU Genetics majors typically take primarily in the following: Genetics and Molecular Cell Biology courses are taken during the third and fourth semesters and Physics I and II during the fifth and sixth semesters.

### **General Education Requirements**

Typical courses that fulfill the College of Agriculture and Life Sciences requirements for Humanities, Social Sciences, Ethics, and the University International Perspectives and US Diversity requirements are listed below. Other courses may apply; contact an advisor in Genetics at ISU or use the TRANSIT function on Iowa State's website: <https://transit.iastate.edu/> to check individual course equivalencies.

Humanities (need 1 course, 3 cr)

Courses from History such as SEICC HIS 131, 132, 151, 152  
SEICC LIT 101, 105; PHI 101, 110, 122

Social Sciences (need 1 course, 3 cr)

Courses from Political Science such as SEICC POL 111  
Courses from Psychology such as SEICC PSY 111, 121, 251  
Courses from Sociology such as SEICC SOC 110, 115, 120

Ethics (need 1 course, 3 cr)

SEICC PHI 105

ISU International Perspectives requirement (need 1 course, 3 cr)

SEICC HIS 131, 132; MUS 100; REL 101

ISU US Diversity requirement (need 1 course, 3 cr)

Literature SEICC LIT 105; Sociology SECC SOC 115

For a full list of SEICC courses which transfer to ISU see the Iowa State University Admissions web page: <http://www.admissions.iastate.edu/equiv/iowa.php?type=transfer>

*This guide was developed to assist students planning to attend Iowa State University to major in Genetics in the College of Agriculture and Life Sciences. The equivalency table is based on the ISU 2017-18 Catalog and course equivalencies provided by the ISU Admissions office. Students should contact Dr. Lois Girton, Genetics advising coordinator ([lgirton@iastate.edu](mailto:lgirton@iastate.edu) or 515-294-0616), for more assistance. **Students should also plan to visit with an advisor in Genetics at ISU prior to beginning their second year of studies, or earlier.***