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

First Semester

Course Title (NEICC)	NEICC	ISU	Credits
College Composition I	ENG 105	ENGL 150	3
General Biology I	BIO 112	BIOL 211	3
General Biology I Lab		BIOL 211L	1
Chemistry I	CHM 160	CHEM 177	3
Chemistry I Lab	CHM 161	CHEM 177L	1.5
Fundamentals of Statistics	MAT 156	STAT 104	3
OR Calculus I	MAT 210	MATH 165	4
			15.5-16.5

Second Semester

Course Title (NEICC)	NEICC	ISU	Credits
College Composition II	ENG 106	ENGL 250	3
General Biology II	BIO 113	BIOL 212	3
General Biology II Lab		BIOL 212L	1
Chemistry II	CHM 170	CHEM 178	3
Chemistry II Lab	CHM 171	CHEM 178L	1.5
Humanities or Social Science	See details below		3
OR Calculus II	MAT 216	MATH 166	4
			15.5-16.5

Third Semester

Course Title (NEICC)	NEICC	ISU	Credits
Humanities or Social Science	See details below		3
General Physics I	PHY 162	PHYS 111	4
Organic Chemistry I	CHM 262	CHEM 331	3
Organic Chemistry I Lab		CHEM 333L	1.5
Fundamentals of Speech	SPC 112	SP CM 212	3
			14.5

Fourth Semester

Course Title (NEICC)	NEICC	ISU	Credits
Ethics Course	See details below		3
General Physics II	PHY 172	PHYS 112	4
Organic Chemistry II		CHEM 332	3
Organic Chemistry II Lab		CHEM 332L	1
International Perspective	See details below		3
			14

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 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. For example, students taking Biology

at NEICC should 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 NEICC HIS 131, 132, 151, 152
- Courses from Literature such as NEICC EDU 235, LIT 101, 227, 228

Social Sciences (need 1 course, 3 cr)
- Courses from Political Science such as NEICC POL111
- Courses from Psychology such as NEICC PSY 111, 121, 251
- Courses from Sociology such as NEICC SOC 110, 115, 120

Ethics (need 1 course, 3 cr)
- Philosophy NEICC PHI 105

ISU International Perspectives requirement (need 1 course, 3 cr)
- History NEICC HIS 131, 132

ISU US Diversity requirement (need 1 course, 3 cr)
- Courses from Sociology such as NEICC SOC 115, 261; Education NEICC EDU 235

For a full list of NEICC 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 2014-15 Catalog and course equivalencies provided by the ISU Admissions office. Students should contact Dr. Lois Girton, Genetics advising coordinator (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.