

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

First Semester

Course Title (NWICC)	NWICC	ISU	Credits
College Composition I	ENG 105	ENGL 150	3
General Biology I	BIOL 102	BIOL 211	3
General Biology II Lab	BIOL 103	BIOL 211L	1
General Chemistry I	CHM 163	CHEM 177	3
General Chemistry I Lab	CHM 164	CHEM 177L	1
Calculus I	MAT 210	MATH 165	4
			15

Second Semester

Course Title (NWICC)	NWICC	ISU	Credits
College Composition II	ENG 106	ENGL 250	3
General Biology II	BIOL 105	BIOL 212	3
General Biology II Lab	BIOL 106	BIOL 212L	1
General Chemistry II	CHM 173	CHEM 178	3
General Chemistry II Lab	CHM 174	CHEM 178L	1
Calculus II	MAT 216	MATH 166	4
			15

Third Semester

Course Title (NWICC)	NWICC	ISU	Credits
Humanities or Social Science	See details below		3 - 6
College Physics I	PHY 156, 157	PHYS 111	4
Statistics	MAT 156	STAT 104	3
Speech	SPC 112	SP CM 212	3
			13 -16

Fourth Semester

Course Title (NWICC)	NWICC	ISU	Credits
Introduction to Ethics	PHI 105	PHIL 230	3
College Physics II	PHY 158, 159	PHYS 112	4
Humanities or Social Science	See details below		3 - 6
International Perspective	See details below		3
			13 -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". 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 NEICC must take both BIO 102, 103, 105, & 106 to receive credits for Biology 211/L and 212/L.**

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. Because Organic Chemistry is not offered, it is very important to complete all the Math, Statistics, Physics, and General Education requirements available at NWICC in order to facilitate completing the degree with two additional years at Iowa State University.

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 NWICC HIS 110, 111, 151, 152
MUS 100, PHI 101, 111, REL 101

Social Sciences (need 1 course, 3 cr)

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

Ethics (need 1 course, 3 cr)

NWICC PHI 105

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

NWICC HIS 151, 152; REL 101

ISU US Diversity (need 1 course, 3 cr)

Sociology NWICC SOC 115; Education NWICC EDU 235; Psychology PSY 261

For a full list of NWICC 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 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.***