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

First Semester

Course Title (HCC)	HCC	ISU	Credits
Composition I	ENG 105	ENGL 150	3
Principles of Biology	BIO 112	BIOL 211	3
Principles of Biology Lab		BIOL 211L	1
General Chemistry I	CHM 165	CHEM 177	3
General Chemistry I Lab		CHEM 177L	1
Calculus I	MAT 210	MATH 165	4
			15

Second Semester

Course Title (HCC)	HCC	ISU	Credits
Composition II	ENG 106	ENGL 250	3
Biology of Organisms	BIO 113	BIOL 212	3
Biology of Organisms Lab		BIOL 212L	1
General Chemistry II	CHM 175	CHEM 178	3
General Chemistry II Lab		CHEM 178L	1
Calculus II	MAT 216	MATH 166	4
			14

Third Semester

Course Title (HCC)	HCC	ISU	Credits
Humanities or Social Science	See details below		3
General Physics I	PHY 162	PHYS 111	4
Ethics	PHI 105	PHIL 230	3
Fundamentals of Oral Communication	SPC 101	SP CM 212	3
Statistics	MAT 156	STAT 104	3
			16

Fourth Semester

Course Title (HCC)	HCC	ISU	Credits
General Physics II	PHY 172	PHYS 112	4
International Perspective	See details below		3
US Diversity	See details below		3
Humanities or Social Science	See details below		3
			13

The Genetics major requires completion of two semesters **with labs** of each of the following sciences: **General Biology, General Chemistry, Organic Chemistry, and Physics**. Because Hawkeye does not offer equivalent Organic Chemistry courses, it is very important that students complete Physics before they transfer to ISU. 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 and one semester of Calculus**. Students planning to transfer after two years should have completed this requirement by taking two Calculus courses and one Statistics course.

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 Hawkeye should take both Biol 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 112/113 is 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 and Organic Chemistry I and II 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 courses, 3 cr)
- Courses from History such as HIS 117, 118, 151, 152
- Courses from Literature such as HCC LIT 101

Social Sciences (need 1 course, 3 cr)
- Courses from Psychology such as HCC PSY 111, 121, 261, SOC 251
- Courses from Sociology such as HCC SOC 110, 115, 120, 205, 220, 230

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

ISU International Perspectives requirement (need 1 course, 3 cr)
- HCC Philosophy REL 101 Religions of the World
- HCC Humanities HIS 112, 113

ISU US Diversity requirement (need 1 course, 3 cr)
- Courses from Sociology such as SOC 115, 205, 261

For a full list of HCC courses that 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.