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

First Semester

Course Title (IHCC)	IHCC	ISU	Credits
College Writing I	ENG 105	ENGL 150	3
Biology I	BIO 120	BIOL 211	3
Biology I Lab		BIOL 211L	1
Chemistry I	CHM 166	CHEM 177	4
Chemistry I Lab		CHEM 177L	1
Statistics	MAT 156	STAT 104	3
OR Calculus I	MAT 210	MATH 165	4
			15-16

Second Semester

Course Title (IHCC)	IHCC	ISU	Credits
College Writing II	ENG 106	ENGL 250	3
Biology II	See details below	BIOL 212	4
Biology II Lab	BIO 121 & 122	BIOL 212L	2
Chemistry II	CHM 176	CHEM 178	4
Chemistry II Lab		CHEM 178L	1
Humanities or Social Science	See details below		3
OR Calculus II	MAT 216	MATH 166	4
			17-18

Third Semester

Course Title (IHCC)	IHCC	ISU	Credits
Humanities or Social Science	See details below		3
General Physics I	See details below	PHYS 111	4.5
Organic Chemistry I	See details below	CHEM 331	3
Organic Chemistry I Lab		CHEM 333L	1.5
Fundamentals of Speech	SPC 112	SP CM 212	3
			15

Fourth Semester

Course Title (IHCC)	IHCC	ISU	Credits
Ethics Course	See details below		3
College Physics II	See details below	PHYS 112	4.5
Organic Chemistry II	See details below	CHEM 332	3
Organic Chemistry II Lab		CHEM 334L	1.5
International Perspective	See details below		3
			15

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 all semesters of any multi-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 IHCC should take both BIO 120 and the combination of BIO 121 and 122 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.
Organic Chemistry I, CHM 251, Organic Chemistry II, CHM 252, and Organic Chemistry III, CHM 253, are all required to fulfill ISU CHEM 331, 331L, 332, and 332L and General Physics I, PHY 151, General Physics II, PHY 152, and General Physics III, PHY 153, are all required to fulfill ISU PHYS 111 and PHYS 112.

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 IHCC HIS 110, 111, 151, 152
- Courses from Humanities such as IHCC CLS 175, DRA 101, REL 101, WST 101
- Courses from Literature such as IHCC LIT 101, 225, 226, 227, 228

Social Sciences (need 1 course, 3 cr)
- Courses from Political Science such as IHCC POL 111, 121
- Courses from Psychology such as IHCC PSY 111, 121, 251, 281; SDV 114
- Courses from Sociology such as IHCC SOC 110, 115, 120

Ethics (need 1 course, 3 cr)
- Courses from Philosophy such as IHCC PHI 101, 145

ISU International Perspectives requirement (need 1 course, 3 cr)
- IHCC Humanities REL 101 Survey of World Religions
- IHCC Social Science HIS 110, 111

US Diversity (need 1 course, 3 cr)
- IHCC CLS 175, IHCC WST 101

For a full list of IHCC 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.