

**Genetics Transfer Plan, College of Liberal Arts and Sciences  
Equivalency with Western Iowa Technical Community College**

**First Semester**

Course Title (SWICC)	SWICC	ISU	Credits
English Composition I	ENG 105	ENGL 150	3
Biology I	BIO 116	BIOL 211	3
Biology I Lab		BIOL 211L	1
Inorganic Chemistry I	CHM 166	CHEM 177	4
Inorganic Chemistry I Lab		CHEM 177L	1
Statistics	MAT 156 or 157	STAT 104 or 101	3 or 4
<b>OR</b> Calculus I	MAT 211	MATH 165	<u>4</u>
			15-16

**Second Semester**

Course Title (SWICC)	SWICC	ISU	Credits
English Composition II	ENG 106	ENGL 250	3
Biology II	BIO 117	BIOL 212	3
Biology II Lab		BIOL 212L	1
Inorganic Chemistry II	CHM 176	CHEM 178	4
Inorganic Chemistry II Lab		CHEM 178L	1
Humanities or Social Science	See details below		3
<b>OR</b> Calculus II	MAT 217	MATH 166	<u>4</u>
			14-15

**Third Semester**

Course Title (SWICC)	SWICC	ISU	Credits
Humanities	See details below		3
General Physics I	PHY 162	PHYS 111	4
Organic Chemistry I	CHM 261	CHEM 331	3
Organic Chemistry I Lab		CHEM 331L	1
Social Science	See details below		<u>3</u>
			14

**Fourth Semester**

Course Title (SWICC)	SWICC	ISU	Credits
Introduction to Ethics	PHI 105	PHIL 230	3
<b>General Physics II</b>	<b>PHY 172</b>	<b>PHYS 112</b>	<b>4</b>
Organic Chemistry II	CHM 271	CHEM 332	3
Organic Chemistry II Lab		CHEM 332L	1
International Perspective	See details below		<u>3</u>
			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". 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 WITCC must take both BIO 116 and 117 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 Liberal Arts and Sciences requirements for Humanities and Social Sciences 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 4 courses, 12 cr, including one Science/Humanities Bridge course, 3 cr)

Courses from History such as WITCC HIS 110, 111, 151, 152

Courses from Literature such as WITCC LIT 101, 105, 110, 111, 140, 141

PHI 101, 111; MUS 100

Science/Humanities Bridge course: WITCC PHI 105

Social Sciences (need 3 courses, 9 cr)

Courses from Political Science such as WITCC POL 111

Courses from Psychology such as WITCC PSY 111, 121, 251, 261

Courses from Sociology such as WITCC SOC 110, 235, 219

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

WITCC REL 101; HIS 110, 111, MUS 100

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

Literature WITCC LIT 105; Sociology WITCC SOC 115; Psychology WITCC PSY 261

For a full list of WITCC 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 Liberal Arts and Sciences. The equivalency table is based on the ISU 2019-20 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.***