

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

First Semester

| Course Title (KCC) | KCC | ISU | Credits |
|----------------------------------|---------|-----------|----------|
| Composition I | ENG 105 | ENGL 150 | 3 |
| College Biology I for Majors | BIO 112 | BIOL 211 | 3 |
| College Biology I Lab for Majors | | BIOL 211L | 1 |
| General Chemistry I | CHM 165 | CHEM 177 | 3 |
| General Chemistry I Lab | | CHEM 177L | 1 |
| Fundamentals of Statistics | MAT 157 | STAT 101 | 4 |
| OR Calculus I | MAT 210 | MATH 165 | <u>4</u> |
| | | | 15 |

Second Semester

| Course Title (KCC) | KCC | ISU | Credits |
|---|-------------------|-----------|----------|
| Composition II | ENG 106 | | |
| OR Composition II: Technical Writing | ENG 108 | ENGL 250 | 3 |
| College Biology II for Majors | BIO 113 | BIOL 212 | 3 |
| College Biology II Lab for Majors | | BIOL 212L | 1 |
| General Chemistry II | CHM 175 | CHEM 178 | 3 |
| General Chemistry II Lab | | CHEM 178L | 1 |
| Humanities or Social Science | See details below | | 3 |
| OR Calculus II | MAT 216 | MATH 166 | <u>4</u> |
| | | | 14-15 |

Third Semester

| Course Title (KCC) | KCC | ISU | Credits |
|-------------------------------|-------------------|-----------|----------|
| Humanities or Social Science | See details below | | 3 |
| College 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 Communication | SPS 101 | | |
| OR Public Speaking | SPC 112 | SP CM 212 | <u>3</u> |
| | | | 14.5 |

Fourth Semester

| Course Title (KCC) | KCC | ISU | Credits |
|---------------------------|-------------------|-----------|----------|
| Introduction to Ethics | PHI 105 | PHIL 230 | 3 |
| College Physics II | PHY 172 | PHYS 112 | 4 |
| Organic Chemistry II | CHM 263 | CHEM 332 | 3 |
| Organic Chemistry II Lab | | CHEM 334L | 1.5 |
| International Perspective | See details below | | <u>3</u> |
| | | | 14.5 |

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". 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 (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 KCC must 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 KCC HIS 121, 122, 123, 124, 151, 152
LIT 105, MUS 100, PHI 101, 105, 111

Social Sciences (need 1 course, 3 cr)

Courses from Political Science such as KCC POL 111, 121
Courses from Psychology such as KCC PSY 111, 121, 251, 261
Courses from Sociology such as KCC SOC 110, 115, 120

Ethics (need 1 course, 3 cr)

KCC PHI 105

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

KCC REL 101; HIS 121, 122, 123, 124

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

KCC PSY 261; REL 140; SOC 115

For a full list of KCC 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 2019-20 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.***