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
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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/](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](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](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._

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