# Genetics Transfer Plan, College of Agriculture and Life Sciences
## Equivalency with Northeast Iowa Community College

### First Semester

<table>
<thead>
<tr>
<th>Course Title (NEICC)</th>
<th>NEICC</th>
<th>ISU</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Composition I</td>
<td>ENG:105</td>
<td>ENGL 150</td>
<td>3</td>
</tr>
<tr>
<td>General Biology I</td>
<td>BIO:112</td>
<td>BIOL 211</td>
<td>3</td>
</tr>
<tr>
<td>General Biology I Lab</td>
<td></td>
<td>BIOL 211L</td>
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</tr>
<tr>
<td>Chemistry I</td>
<td>CHM:160</td>
<td>CHEM 177</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry I Lab</td>
<td>CHM:161</td>
<td>CHEM 177L</td>
<td>1.5</td>
</tr>
<tr>
<td>Calculus I</td>
<td>MAT:210</td>
<td>MATH 165</td>
<td>4</td>
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</tbody>
</table>

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<thead>
<tr>
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<th>ISU</th>
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</tr>
</thead>
<tbody>
<tr>
<td>College Composition II</td>
<td>ENG:106</td>
<td>ENGL 250</td>
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<tr>
<td>General Biology II</td>
<td>BIO:113</td>
<td>BIOL 212</td>
<td>3</td>
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<tr>
<td>General Biology II Lab</td>
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<td>BIOL 212L</td>
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</tr>
<tr>
<td>Chemistry II</td>
<td>CHM:170</td>
<td>CHEM 178</td>
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<tr>
<td>Chemistry II Lab</td>
<td>CHM:171</td>
<td>CHEM 178L</td>
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<tr>
<td>Calculus II</td>
<td>MAT:216</td>
<td>MATH 166</td>
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### Third Semester

<table>
<thead>
<tr>
<th>Course Title (NEICC)</th>
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<th>ISU</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Humanities or Social Science</td>
<td>See details below</td>
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</tr>
<tr>
<td>General Physics I</td>
<td>PHY:162</td>
<td>PHYS 111</td>
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</tr>
<tr>
<td>Organic Chemistry I</td>
<td>CHM:262</td>
<td>CHEM 331</td>
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<td>Organic Chemistry I Lab</td>
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<tr>
<td>Fundamentals of Speech</td>
<td>SPC:112</td>
<td>SP CM 212</td>
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### Fourth Semester

<table>
<thead>
<tr>
<th>Course Title (NEICC)</th>
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<th>ISU</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Ethics</td>
<td>PHI:105</td>
<td>PHIL 230</td>
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<tr>
<td>Statistics</td>
<td>MAT:156</td>
<td>STAT 104</td>
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<tr>
<td>General Physics II</td>
<td>PHY:172</td>
<td>PHYS 112</td>
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<tr>
<td>International Perspective</td>
<td>See details below</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

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”. Chem 333L will be substituted for the one credit 331L 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 NEICC 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/](https://transit.iastate.edu/) to check individual course equivalencies.

**Humanities (need 1 course, 3 cr)**
- Courses from History such as NEICC HIS:131, 132, 151, 152
- Courses from Literature such as NEICC EDU:235, LIT:101

**Social Sciences (need 1 course, 3 cr)**
- Courses from Political Science such as NEICC POL:111
- Courses from Psychology such as NEICC PSY:111, 121, 251, 261
- Courses from Sociology such as NEICC SOC:110, 115, 120

**Ethics (need 1 course, 3 cr)**
- NEICC PHI:105

**ISU International Perspectives requirement (need 1 course, 3 cr)**
- NEICC History HIS:131, 132

**ISU US Diversity requirement (need 1 course, 3 cr)**
- Courses from Sociology such as NEICC SOC 115, 261; Education NEICC EDU 235

For a full list of NEICC 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.*