# Genetics Transfer Plan, College of Liberal Arts and Sciences

## Equivalency with Eastern Iowa Community College District

**Scott, Clinton, and Muscatine Community Colleges**

### First Semester

<table>
<thead>
<tr>
<th>Course Title (EICC)</th>
<th>EICC</th>
<th>ISU</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition I</td>
<td>ENG 105</td>
<td>ENGL 150</td>
<td>3</td>
</tr>
<tr>
<td>General Biology I</td>
<td>BIO 114</td>
<td>BIOL 211</td>
<td>3</td>
</tr>
<tr>
<td>General Biology I Lab</td>
<td>BIOL 211L</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>General Chemistry I</td>
<td>CHM 165 or 166*</td>
<td>CHEM 177</td>
<td>3-4</td>
</tr>
<tr>
<td>General Chemistry I Lab</td>
<td>*preferable</td>
<td>CHEM 177L</td>
<td>1</td>
</tr>
<tr>
<td>Fundamentals of Statistics</td>
<td>MAT 156</td>
<td>STAT 104</td>
<td>3</td>
</tr>
<tr>
<td><strong>OR</strong> Calculus and Analytical Geometry I</td>
<td>MAT 210</td>
<td>MATH 165</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits: 15-16**

### Second Semester

<table>
<thead>
<tr>
<th>Course Title (EICC)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>English Composition II</td>
<td>ENG 106</td>
<td>ENGL 250</td>
<td>3</td>
</tr>
<tr>
<td>General Biology II</td>
<td>BIO 115</td>
<td>BIOL 212</td>
<td>3</td>
</tr>
<tr>
<td>General Biology II Lab</td>
<td>BIOL 212L</td>
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<tr>
<td>General Chemistry II</td>
<td>CHM 175 or 176*</td>
<td>CHEM 178</td>
<td>3-4</td>
</tr>
<tr>
<td>General Chemistry II Lab</td>
<td>*preferable</td>
<td>CHEM 178L</td>
<td>1</td>
</tr>
<tr>
<td>Humanities or Social Science</td>
<td>See details below</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>OR</strong> Calculus and Analytical Geometry II</td>
<td>MAT 216</td>
<td>MATH 166</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits: 15-16**

### Third Semester

<table>
<thead>
<tr>
<th>Course Title (EICC)</th>
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<th>ISU</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>See details below</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>College Physics I</td>
<td>PHY 162</td>
<td>PHYS 111</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry I</td>
<td>CHM 261 or 263</td>
<td>CHEM 331</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry I Lab</td>
<td>CHEM 331L or 333L</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>See details below</td>
<td>3</td>
<td></td>
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</tbody>
</table>

**Total Credits: 14-15**

### Fourth Semester

<table>
<thead>
<tr>
<th>Course Title (EICC)</th>
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<th>ISU</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Ethics</td>
<td>PHI 105</td>
<td>PHIL 230</td>
<td>3</td>
</tr>
<tr>
<td>College Physics II</td>
<td>PHY 163</td>
<td>PHYS 112</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry II</td>
<td>CHM 271 or 273</td>
<td>CHEM 332</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry II Lab</td>
<td>CHEM 332L or 334L</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>International Perspective</td>
<td>See details below</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits: 14-15**

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 associated with CHM 263 and 273 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 EICC must take both BIO 114 and 115 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 course, 3 cr, of Science/Humanities Bridge)
- Courses from History such as EICC HIS 117, 151, 152
- Courses from Humanities such as EICC HUM 105, 110
- Courses from Literature such as EICC LIT 101, 105, 110, 111
- Science/Humanities Bridge required by major (3 cr) PHI 105

Social Sciences (need 3 courses, 9 cr)
- Courses from Political Science such as EICC POL 111
- Courses from Psychology such as EICC PSY 111, 121, 251
- Courses from Sociology such as EICC SOC

ISU International Perspectives requirement (need 1 course, 3 cr)
- EICC Music MUS 100
- EICC History HIS 117, 118, 119

ISU US Diversity requirement (need 1 course, 3 cr)
- Sociology EICC SOC 115; Literature EICC LIT 105; Psychology EICC PSY 261

For a full list of EICC 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 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.