Genetics Transfer Plan, College of Liberal Arts and Sciences
Equivalency with North Iowa Area Community College

First Semester
Course Title (NIACC) | NIACC | ISU | Credits
--- | --- | --- | ---
Composition I | ENG 105 | ENGL 150 | 3
Biology I | BIO 202 | BIOL 211 | 3
Biology Lab | | BIOL 211L | 1
Chemistry Principles I | CHM 166 | CHEM 177 | 4
Chemistry Principles I Lab | | CHEM 177L | 1
Introduction to Statistics | MAT 156 | STAT 104 | 3
OR Analytic Geometry and Calculus I | MAT 210 | MATH 165 | 4

Second Semester
Course Title (NIACC) | NIACC | ISU | Credits
--- | --- | --- | ---
Composition II | ENG 106 | ENGL 250 | 3
Biology II | BIO 203 | BIOL 212 | 3
Biology Lab | | BIOL 212L | 1
Chemistry Principles II | CHM 176 | CHEM 178 | 4
Chemistry Principles II Lab | | CHEM 178L | 1
Humanities or Social Science | See details below | | 3
OR Analytic Geometry and Calculus II | MAT 216 | MATH 166 | 4

Third Semester
Course Title (NIACC) | NIACC | ISU | Credits
--- | --- | --- | ---
Humanities | See details below | | 3
General Physics I | PHY 162 | PHYS 111 | 4
Organic Chemistry I | CHM 263 | CHEM 331 | 3
Organic Chemistry I Lab | | CHEM 333L | 2
Social Science | See details below | | 3

Fourth Semester
Course Title (NIACC) | NIACC | ISU | Credits
--- | --- | --- | ---
Introduction to Ethics | PHI 105 | PHIL 230 | 3
General Physics II | PHY 172 | PHYS 112 | 4
Organic Chemistry II | CHM 273 | CHEM 332 | 3
Organic Chemistry II Lab | | CHEM 334L | 2
International Perspective | See details below | | 3

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 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 NIACC must take both BIO 202 and 203 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 NIACC HIS 112, 113, 151, 152
NIACC EDU 235; LIT 101; PHI 101
Science/Humanities Bridge Course: NIACC PHI 105

Social Sciences (need 3 courses, 9 cr)
Courses from Political Science such as NIACC POL 111, 112
Courses from Psychology such as NIACC PSY 111, 121, 281
Courses from Sociology such as NIACC SOC 110, 115, 120

ISU International Perspectives requirement (need 1 course, 3 cr)
NIACC HIS 112, 113, MUS 100

ISU US Diversity (need 1 course, 3 cr)
Sociology NIACC SOC 115; Education EDU 235;

For a full list of NIACC 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.