



# Transfer Planning Worksheet 2025-2026



**NORTH CENTRAL  
COLLEGE 1861**

Student Name: \_\_\_\_\_ North Central ID# \_\_\_\_\_ College Representative: \_\_\_\_\_ Date: \_\_\_\_\_

## Biology, Biological Sciences Track, B.S.

The B.S. degree in Biology provides a comprehensive foundation for students with interests in any area of the biological sciences, including key support courses from chemistry, physics and mathematics. This degree is appropriate for students planning for careers at the bachelor's level as well as those preparing for graduate or professional study after graduation. All B.S. students complete a common core, then select upper-division courses that match their specific interests and career plans. Research experience is built into the program for all students, as is the development of skills in scientific writing and presentation.

Students can choose from two tracks (and can switch between the tracks if their interests change). The Biological Science track is appropriate for those preparing for research careers, graduate school or employment in any area of biology, while the Biomedical Science track is appropriate for students preparing for medical, dental or veterinary programs after graduation. Students preparing for secondary education should complete the B.S. Biology Education track. Students preparing for careers that combine biology with another area or for the allied health fields may wish to consider a B.A. program.

## Major Requirements

Core Courses			
Course Name	Equivalent	Credit	Grade
BIOL 195 - Investigating Biology or BIOL 205 - Exploring Biology			
BIOL 210 - Cells and Systems			
BIOL 220 - Ecology and Evolution	BIS 205 @ TC		
BIOL 230 - Genes and Genomics			
BIOL 240 - Biostatistics			
Capstone			
Course Name	Equivalent	Credit	Grade
BIOL 400 – Capstone Studies in Biological Sciences			
Research Experience			
Students must complete a research experience which is presented in BIOL 490 - Seminar; students take the zero-credit BIOL 290 – Seminar once as participants/evaluators and the two credit BIOL 390 – Careers in Biological Sciences once before presenting. The research experience could be any of the following:			
<ul style="list-style-type: none"> <li>Complete the BIOL 400 research course</li> <li>Complete an on- or off-campus summer research program</li> <li>Complete an independent research project with a faculty member</li> <li>Complete a research-based internship or other project approved by the department chair</li> </ul>			
Biological Science Track Courses			
Advanced Electives			
Three of the following:			
Course Name	Equivalent	Credit	Grade
BIOL 310 - Biology of Animals			
BIOL 315 - Animal Physiology			
BIOL 317 - Animal Behavior			
BIOL 320 - Plant Growth and Function			
BIOL 325 - Plant Interactions in a Changing World			
BIOL 330 – Evolution			
BIOL 340 - Infectious Disease			
BIOL 350 - Conservation Ecology			
BIOL 360 - Molecular Biology of Cancer			

BIOL 370 - Mechanisms of Development			
BCHM 365 - Principles of Biochemistry			
NEUR 310 - Advanced Molecular Neuroscience			

### Required Support Courses

Course Name	Equivalent	Credit	Grade
CHEM 121 - General Chemistry I	CHM 140 @ TC		
CHEM 122 - General Chemistry II	CHM 141 @ TC		
CHEM 251 - Organic Chemistry I	CHM 234 @ TC		
CHEM 252 - Organic Chemistry II	CHM 235 @ TC		
CHEM 310 - Chemical Analysis			

### Additional Requirements for the B.S. Degree

Course Name	Equivalent	Credit	Grade
MATH 151 - Calculus I	MAT 131 @ TC		

#### Four credit hours from the following list:

- An alternate course that clearly enhances the biology major for the student, such as an advanced biology course taken in a study- abroad program that has no direct NCC equivalent, can potentially be substituted with the approval of the department chair.

Course Name	Equivalent	Credit	Grade
BIOL 241 - Advanced Biostatistics			
BIOL 242 - Bioinformatics			
BIOL 250 - Field Biology			
CHEM 311 - Separation Methods			
CHEM 315 - Spectral Interpretation			
CSCE 160 - Introduction to Computer Programming	CIS 121, CIS 255, CIS 263, or CIS 264 @ TC		
ENGL 282 - Writing in STEM Professions			
ENVI 260 - Introduction to Geographic Information Systems			
HTSC 310 - Principles of Epidemiology for the Health Sciences			
MATH 152 - Calculus II	MAT 133 @ TC		
MATH 255 - Linear Algebra and Differential Equation			
300-Level Morton Arboretum or Shedd Aquarium Courses			

### Physics Sequence

One of the following sequences:

#### Non-Calculus

Course Name	Equivalent	Credit	Grade
PHYS 131 - Physics I (Non-Calculus)	PHY 101 @ TC		
PHYS 132 - Physics II (Non-Calculus)	PHY 102 @ TC		

#### Calculus-Based

Course Name	Equivalent	Credit	Grade
PHYS 161 - Physics I: Mechanics and Heat	PHY 106 @ TC		
PHYS 162 - Physics II: Electromagnetism, Waves and Optics	PHY 107 @ TC		