

Institution	<b>Northern Michigan University</b>
Degree/Program	<b>Biology (with concentrations in Botany, Ecology, General Biology, Microbiology, Physiology, or Zoology)</b>
Credits Required	<b>120</b>

## MICHIGAN TRANSFER AGREEMENT (MTA)

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether or not any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. Be aware that "double count" policies differ from institution to institution. More information about the MTA is available at [www.mitransfer.org](http://www.mitransfer.org).

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Biology MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MITRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

Pathway Course	Subject/ Course Number	Course Title	Credit Hrs
Cell/Molecular Biology	BI 111	Introductory Biology - Principles	4
Organismal Biology	BI 112	Introductory Biology – Diversity	4
General Chemistry I	CH 111	General Chemistry I	5
General Chemistry II	CH 112	General Chemistry II	5
Organic Chemistry I	CH 315/CH 317 (lecture/lab) or CH 220	Organic Chemistry I Intro to Organic Chemistry	4/ 5
Organic Chemistry II	CH 325/CH 327 (lecture/lab): required for Botany, Microbiology, Physiology & Zoology concentrations	Organic Chemistry II	4
TOTAL CREDITS			26-27

## REMAINING DEGREE REQUIREMENTS

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution.

General Education or Program Requirement	Subject/ Course Number	Course Title	Credit Hrs
Program requirement	PH 201	College Physics I	5
Program requirement	PH 202	College Physics II	5
Many students take physics in their junior or senior year, some take physics in their first two years.			
Only 1 semester of physics is required for students with Ecology or General Biology concentrations.			
		CC Only: Add remaining hours	
TOTAL CREDITS			10