



Alpena Community College

2021/22

Western Michigan University Biology Curriculum Guide

Pre-Biology requirements:

- The following courses are the prerequisites for biology, biomedical sciences, and biology-secondary education (high school level) majors.
- This major is a good choice for students going into entry-level employment in the field of biology, biology graduate programs, or professional schools such as physician assistant, physical therapy, medical, dental, and veterinary schools.
- A **minimum of 15 credits of biology** must be earned at WMU for the major.
- Only departmental courses in which a grade of “C” or better is obtained may be counted toward a major or minor in Biological Sciences.

WMU courses	ACC courses
BIOS 1610	BIO 161
BIOS 1600	BIO 162
BIOS 2020	BIO 210 (elective for biomed majors)
BIOS 2030	BIO 211 (elective for biomed majors)
BIOS 2110	BIO 201
BIOS 2300	BIO 217
CHEM 1100 1110	CEM 121
CHEM 1120 1130	CEM 122
CHEM 3750 3760	CEM 221
CHEM 3770 3780	CEM 222
PHYS 1130 1140	PHY 121
PHYS 1150 1160	PHY 122
MATH 1220 or 2000	MTH 131 or 130
STAT 3660	MTH 223

General education requirements:

- Please see the [Western Essential Studies \(WES\) transfer guide](#).

- All students graduating from the College of Arts & Sciences must meet the world language proficiency by completing two semesters (6-8 hours) of the same foreign language or American Sign Language or passing WMU's proficiency by exam. Please contact the College of Arts & Sciences Undergraduate Advising Office at (269) 387-4366 with questions. Neither the MACRAO Agreement nor the MTA satisfy this requirement.
- If the student's first language is not English, then the student is exempt from this requirement. Determination of eligibility for this exemption is based on whether the student was required to take the TOEFL test for admission and can be verified through the WMU departments of Spanish or World Languages and Literatures.

Important notes:

- The chemistry, physics, and mathematics courses are called "cognate" requirements for biology department majors and may not be waived.
- The physics and chemistry courses have a minimum prerequisite of successful completion of high school advanced algebra (MTH 113 at ACC).
- For questions about **WES** or biology major requirements please contact the WMU College of Arts & Sciences Biology advisor at the email address given below.
- Prior to enrolling in WMU courses, students should consult the biology advisor listed below.

Approved by:

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