



Biology Minor 2022-2023 Catalog

The biology minor consists of a minimum of 24 credits in biology exclusive of BIO 104, 105, 107, 109, 205, and any other Biology course whose course description prevents it from being used in the minor. Students may count only **one** of the following courses as an elective in the minor: BIO 309, 311, 329, or 349. CMB 405, 406, 411, 414, or 426 may be counted as electives in the minor with approval of the Biology Unit Head. CHM 109 or CHM 115 is a required cognate in addition to the 24 credits of biology.

Complete all of the following courses:

_____ BIO 120 – General Biology I (4 cr.) (Prerequisite: High school chemistry, CHM 109 or CHM 115 strongly recommended concurrently)

_____ BIO 121 – General Biology II (4 cr.) (Prerequisite: MTH 110 or higher [may be taken concurrently])

Complete 16 additional credits in Biology (BIO) to reach a total of 24 credits.

*****Students selecting the biology minor for teacher certification are strongly advised to consult either the CLAS Academic Advising Center or the Biology Department for guidance on which BIO courses to complete to satisfy the State Standards for Teaching Biology and to prepare for the Michigan Test for Teacher Certification (MTTC) in Biology.** To assure both breadth and depth in the teaching minor, in addition to completing BIO 120 (General Biology I) and BIO 121 (General Biology II), students should complete BIO 210 (Evolutionary Biology), BIO 215 (Ecology), BIO 355 (Human Genetics) or BIO 375 (Genetics), a Plant Organismal Biology course from elective from Category I (see catalog), and BMS 202 (Anatomy and Physiology). Students considering the Integrated Science Secondary Endorsement should choose BIO 375 and the CHM 115 cognate.

_____ Additional course (___ cr.)

_____ Additional course (___ cr.)

_____ Additional course (___ cr.)

_____ Additional course (___ cr.)

_____ Additional course (___ cr.)

_____ Additional course (___ cr.)

Complete one of the following cognate courses (not included in 24 credit minimum):

_____ CHM 109 – Introductory Chemistry (4 cr.)

_____ CHM 115 – Principles of Chemistry I (4 cr.) (Prereq: High School chemistry, MTH 110 or MTH 122 or MTH 125 or MTH 201)

Students may count up to **8 credits** from the following BMS-designated courses toward the required 24 credits in biology.

BMS 202 Anatomy and Physiology Credits: 4, **OR** the following two courses:

BMS 208 - Human Anatomy Credits: 3 **AND** BMS 309 - Laboratory in Human Anatomy Credits: 1

BMS 212 - Introductory Microbiology Credits: 3 **AND** BMS 213 - Laboratory in Microbiology Credits: 1

BMS 250 - Anatomy and Physiology I Credits: 4

BMS 251 - Anatomy and Physiology II Credits: 4

BMS 290 - Human Physiology Credits: 3 **AND** BMS 391 - Laboratory in Human Physiology Credits: 2

Since specific BMS course requirements vary among majors, students should seek the advice of their major advisors on which of these BMS courses to take and the appropriate sequence in which to take them. Students should contact the Biology Department if they have questions on how the specified BMS courses may be applied to the Biology minor.

It is imperative to meet with your faculty advisor or an advisor in the CLAS Academic Advising Center early in your career.

The CLAS Academic Advising Center is located in C-1-120 & 140 MAK, 616-331-8585.

Online at: <http://www.gvsu.edu/clasadvising>

Prepared by CLAS Academic Advising Center – updated March 2022