Biology: Four Year Plan Dentistry

Blue lettering BIOLOGY major requirements

Updated March 2026: H.Banks, Office of Health Professions, hbanks@gustavus.edu
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First Year: Fall

BIO 110 Principles of Biology (DAT) & BIO 111 Lab (offered Fall only)

CHE 110 General Chemistry (DAT) & CHE 111 General Chemistry Lab OR CHE 105 Foundations of Chemistry I (DAT) & CHE 106 Foundations of Chemistry I Lab

*Before you can register for CHE 105 or 110, you are required to take the Chemistry placement exam. (CHE 105/106 offered Fall only. CHE 105/106 is an optional course that can be taken before CHE 110/111 to build a stronger chemistry foundation.) Find out more about the CHE placement exam, Click **HERE** .*

FTS 100 First Term Seminar (Writing Intensive course- WRIT)

PSY 100 Introductory Psychology (or Spring)

First Year: Spring

BIO 120 Organismal Biology (DAT) & BIO 121 Lab (offered Spring only; students who wish to take the introductory biology series can start with BIO 120/121 in the spring and complete it with BIO 110/111 in the fall of their second year)

CHE 120 Organic Chemistry I (DAT) & CHE 121 Organic Chemistry I Lab (offered Fall and Spring)

Students who started with CHE 105/106 should take CHE 110/111 so that they are ready to take CHE 120/121 in the Fall of their second year)

MCS 121 Calculus I or MCS 142 Introduction to Statistical Methods

Second Year: Fall

CHE 220 Organic Chemistry II (DAT) & CHE 221 Organic Chemistry II Lab (offered Fall only)

BIO 250 Cell and Molecular Biology & BIO 251 Lab (offered Fall only)

(This course has a prerequisite of CHE 120/121; reach out to the current Biology Department Chair if you have not completed CHE 120/121. In some circumstances, you may be able to take CHE 120/121 concurrently with BIO 250/251.)

*English- composition (some composition recommendations: ENG 100 Writing Process, ENG 112 Creative Writing, ENG 253 Writing Fiction WRITD, ENG 256 Writing Creative Nonfiction WRITD)

*(U of M prerequisite requirement: Two composition courses are preferred; or one composition course, and one additional course in either literature, humanities, or public speaking that is designated as writing intensive)

Second Year: Spring
CHE 230 Inorganic Chemistry I (DAT recommended) & CHE 231 Inorganic Chemistry I Lab (offered Spring only)

BIO 260 Evolution, Ecology, and Behavior & BIO 261 Lab (offered Spring only)

Third Year: Fall

PHY 120 General Physics I & PSY 121 General Physics I Lab (offered Fall only)

*ART 141 Form and Surface, Ceramic Tech (*U of MN top recommendation) Spring semester only **or** ART 110 Drawn Conn and Visual Narratives (Fall & Spring) **or** ART 121 Sculptural Modes (Fall and Spring) (recommended)

300- level BIO course

Third Year: Spring

PHY 170 General Physics II & PHY 171 General Physics II Lab (offered Spring only)

300- level BIO course (possibly BIO 360/361 Microbiology & Lab)

Fourth Year: Fall

CHE 270 Biochemistry & CHE 271 Lab (or 300- level BIO course if planning to take CHE 270 Biochemistry & Lab in Spring - need 3 x 300-level biology courses total, one of which should be BIO360/361 Microbiology which is a Spring only course)

HES 230 Human Anatomy & Physiology I & HES 231 Human Anatomy & Physiology I Lab (offered Fall only)

S/A 112 Introduction to Sociology or other sociology course (prerequisite University of Michigan)

Fourth Year: Spring

BIO 360 Microbiology & BIO 361 Lab (or CHE 270/271 Biochemistry & Lab)

HES 240 Anatomy & Physiology II & HES 241 Anatomy & Physiology II Lab (offered Spring only)