

BMB BIOTECHNOLOGY: 88 to 89 credits in MajorDepartment of Biological Sciences: Phone 320-308-2039 or Biology@stcloudstate.edu

Biotechnology Major Advisors

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First Semester	Second Semester
¹ Biology 151 (4cr) or 152 (4cr) ² Chemistry 210 (4cr) ³ Math 112 (3cr) Liberal Education Course (3 or 4cr) Total Semester Credits=14 to 15	¹ Biology 151 (4cr) or 152 (4cr) Chemistry 211 (4cr) ⁴ Molecular Biology Techniques BMB 123 (3cr) Liberal Education Course (3 or 4cr) Total Semester Credits=14 to 15
Third Semester	Fourth Semester
BIOL 262 (4cr) Chemistry 310 (5cr) Physics 231 (4Cr) Statistics 239 (3cr) AND Biology 339 (1cr) (A Liberal Education course may be taken if Statistics 239 was previously completed.) Total Semester Credits=17	BIOL 360 (4Cr) Chemistry 311 (4 Cr) Physics 232 (4 Cr) Liberal Education Course (3 or 4cr) Total Semester Credits=15 to 16
Fifth Semester	Sixth Semester
BIOL 362 (4cr) Chemistry 480 (4Cr) Math 211 (3Cr) Liberal Education Course (3 or 4cr) Total Semester Credits=14 to 15	Biology 468 or 472 or 482 (3 or 4Cr) Math 212 (3 Cr) Chemistry 481 (4Cr) ⁵ Biology 444 (1Cr) Liberal Education Course (3 or 4cr) Total Semester Credits=14 to 16
Seventh Semester	Eighth Semester
Biology 468 or 472 or 482 (3 or 4Cr) ⁵ Biology Elective (4Cr) Liberal Education Course (6 or 7Cr)) Total Semester Credits=13 to 15	Biology 468 or 472 or 482 (3 or 4Cr) Biology 484 (4Cr) Liberal Education course (6 or 7Cr) Total Semester Credits=13 to 15

Each semester it is recommended that you enroll in approximately 15 credits.

Notes:¹Biology 151 and 152 may be taken in any order, i.e., 151 is **not** a prerequisite for 152. Both courses require college level math placement (i.e., eligibility for MATH 193.)² There is no placement exam to get into CHEM 210. Must have completed CHEM 160 or an ACT math sub-score of 23 or higher; or have completed MATH 072 or higher. Students without high school chemistry with the math requirements for CHEM 210 are strongly urged to take CHEM 160.Refer to: <https://www.stcloudstate.edu/chemistry/programs/placement.aspx>³To determine your readiness for Mathematics 112 contact the Math Department at 320-308-3001. The Mathematics department provides a Math placement exam which is required before enrolling in a Math/Stats class. Refer to: <https://www.stcloudstate.edu/mathstat/placement/default.aspx>⁴Contact your Biology advisor for approved Biology Technology electives. Contact Departments after February 1st to determine expected Summer course offerings. Not all Biology electives are offered both Fall and Spring Semesters. Contact the Biology Department for specific course offerings.⁵An internship experience is required for all Biotechnology students. Most students complete this requirement during their junior or senior year, often during the summer break. Please see advisor.SCSU requires a minimum of 1) 120 semester credits to earn a Bachelor's degree, 2) 40 of these credits must be at the 300 or 400-level. A minimum of 40 Liberal Education credits are required at 300 or 400-level for graduation covering 10 goal areas. Required Biomedical Science courses will cover Goals 3, 4, and 10. Students must complete 3 Diversity courses from 3 different rubrics or academic areas. It is strongly recommended that one Diversity course be an approved Racial Issues course. It is essential to see your biology advisor during the first semester you are enrolled in BIOL courses. Contact Biology Department after February 1st to inquire about expected summer courses. Biology Department can be contacted for specific course offerings at 320-308-2039.

Updated Sept 2019

**BS — Biochemistry and Molecular Biology:
Biotechnology or Biochemistry (77-81 credits)**

**Most courses have pre-requisites.
See SCSU Undergraduate bulletin
<https://catalog.stcloudstate.edu> .**

