



# STUDENT SUCCESS CENTER

COLLEGE OF SCIENCE AND MATHEMATICS  
www.umb.edu/ssc

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## Sample Four-Year Plan for a BS in Biochemistry

	Fall Semester	Spring Semester
Freshman Year	Chemistry 115 & 117 – 5 cr Biology 111 – 4 cr Math 130 – 3 cr English 101 – 3 cr  (15 credits)	Chemistry 116 & 118 – 5 cr Biology 112 – 4 cr Math 145 (or 140) – 4 cr First Year Seminar – 4 cr  (17 credits)
Sophomore Year	Biology 212 – 3 cr Chemistry 251 & 255 – 5 cr Math 146 (or 141) – 4 cr English 102 – 3 cr  (15 credits)	Biology 254 – 3 cr Chemistry 252 & 256 – 5 cr Physics 113 & 181 – 6 cr Intermediate Seminar – 3 cr  (17 credits)
Junior Year †	* Biochemistry 383 & 385 – 6 cr Physics 114 & 182 – 6 cr General Education – 3 cr  (15 credits)	* Biochemistry 384 & 386 – 6 cr Elective – 3 cr General Education – 3 cr General Education – 3 cr  (15 credits)
Senior Year	** Biochemistry 491 – 3 cr * Chemistry 311 & 313 – 6 cr General Education – 3 cr Elective – 3 cr  (15 credits)	* Biology 372 – 3 cr ** Biochemistry 492 – 3 cr * Chemistry 312 – 4 cr Elective – 3 cr General Education – 3 cr  (16 credits)

\* - Class may be offered only once a year.

† - The Writing Proficiency Requirement (WPR) is recommended to be completed at 60-75 credits. Please consult the WPR website:  
[www.umb.edu/academics/vpass/undergraduate\\_studies/writing\\_proficiency](http://www.umb.edu/academics/vpass/undergraduate_studies/writing_proficiency)

\*\* - Required only for students wishing to graduate with honors; all others can take an elective.

- This document is a suggested plan for the major. Students must meet with their faculty advisor each semester and refer to their degree audit to ensure adequate progress toward their degree.
- Students are strongly advised to select general education courses which fulfill multiple requirements.

## Biochemistry BS Course Number Guide

This course guide provides the detailed names of courses listed by number on the four-year plans. It is not a comprehensive list of courses for your major, or a substitute for an advising appointment! Consult with your faculty advisor when choosing courses, and check your degree audit regularly.

Biochemistry 383 & 385 – Biochemistry I Lecture & Laboratory

Biochemistry 384 & 386 – Biochemistry II Lecture & Laboratory

Biochemistry 491 – Directed Research in Biochemistry I

Biochemistry 492 – Directed Research in Biochemistry II

Biology 111 – General Biology I Lecture & Laboratory

Biology 112 – General Biology II Lecture & Laboratory

Biology 212 – Cell Biology Lecture

Biology 254 – Genetics Lecture

Biology 372 – Molecular Biology Lecture

Chemistry 115 & 117 – Chemical Principles I Lecture & Laboratory

Chemistry 116 & 118 – Chemical Principles II Lecture & Laboratory

Chemistry 251 & 255 – Organic Chemistry I Lecture & Laboratory

Chemistry 252 & 256 – Organic Chemistry II Lecture & Laboratory

Chemistry 311 & 313 – Analytical Chemistry Lecture and Laboratory

Chemistry 312 – Physical Chemistry

Math 130 – Pre-Calculus

Math 140 – Calculus I

Math 141 – Calculus II

Math 145 – Calculus I for Life and Environmental Sciences

Math 146 – Calculus II for Life and Environmental Sciences

Physics 113 & 181 – Fundamentals of Physics I Lecture & Laboratory

Physics 114 & 182 – Fundamentals of Physics II Lecture & Laboratory

### **Additional resources:**

[www.umb.edu/academics/vpass/undergraduate\\_studies/general\\_education\\_requirements](http://www.umb.edu/academics/vpass/undergraduate_studies/general_education_requirements)

[www.umb.edu/academics/course\\_catalog/search](http://www.umb.edu/academics/course_catalog/search)

[www.umb.edu/academics/csm/student\\_success\\_center/degree\\_planning/math\\_placement](http://www.umb.edu/academics/csm/student_success_center/degree_planning/math_placement)