BMB Requirements for Transfer Students

(Visit the BMB website for more information)

Transfer students wishing to complete the BMB major in four semesters or fewer should have taken at least the following before transferring to UMass Amherst:

- Introductory Biology I, II, and lab for STEM majors* (Biol 151, 152, and 153)
- General Chemistry I and II with lab for STEM majors* (Chem 111 and 112)
- Organic Chemistry I and II with lab (Chem 261, 262, and 269)
- Calculus I and II (Math 127/131 and 128/132)

Additional foundational requirements include Stats 240 or equivalent (Math 233 can also be used), Physics 131/151, and Physics 132/152.

*Note: Transfer students must take Introductory Biology and General Chemistry courses that specify that they are intended for students pursuing a science degree; courses that do not specify this intention are *not adequate* preparation and generally lead to poor outcomes in 200-level and higher Biochem courses at UMass Amherst.

BMB keeps close track of seniority in the major and eligibility for Biochem courses to facilitate timely graduation, but extra time to complete the major may be necessary if prerequisites are lacking.

BMB Major Policies:

- I. BMB majors must complete General Chemistry 1, General Chemistry 2, Calculus 1, and Calculus 2 with a GPA of 2.5 or above. Basically, aim for a B- or better in these courses!
- II. BMB majors must achieve a grade of B- or better in Biochem 285 or equivalent, as other Biochem courses require this as prerequisite. Note: Cell Biology courses are not equivalent to Biochem 285.
- III. BMB majors should achieve a grade of C- or above (and no "P" grades) in all Biochem courses required for the major. Students should plan to repeat the course if they don't meet this requisite.

BMB Major Upper-Level Requirements:

- Biochem 285 (Cellular & Molecular Biology)
 - o Prerequisites: Bio 152 AND Chem 112/122H
- Biochem 376 (Intro Lab)
 - Prerequisite: Biochem 285
- Biochem 311 (Genetics)
 - o Prerequisite: Bio 151 AND Bio 152
- Biochem 394RI (Integrative Experience)
 - Prerequisite: Biochem 285
- Biochem 423 (General Biochemistry)
 - o Prerequisites: Biochem 285 AND Chem 261 AND Chem 262
- Biochem 424 (Molecular Cell Biology)
 - o Prerequisite: Biochem 423
- Biochem 426 (Advanced Lab)
 - O Prerequisites: Biochem 376 AND Biochem 423

- Biochem 430H (Science Writing)
 - o Prerequisites: Biochem 423
- Biochem 471 (Physical Chemistry)
 - Prerequisites: Chem 112/122H AND Physics 132/152/182 AND Math 128/132—ALL with a grade of Cor better
- Advanced Elective Requirements: minimum total of **8 CREDITS**
 - O Not including courses required for the BMB major or Practica courses
 - o Independent Study/Research credits may be counted as advanced elective credits