

Sample Biology Roadmap: Biomedical Science

The following is one potential roadmap to prepare for a career in biomedical science. It is only a suggestion; students have successfully prepared for biomedical science-related fields using a variety of course schedules. Some choose to reduce their course load each semester by taking summer courses. **Students should consult their advisors and programs of interest to plan their academic schedule.**

Students interested in the Accelerated BS – MS (4+1) program at Winthrop should contact the graduate director, Dr. Kristi Westover, and apply before their senior year. Students may receive credit for 9 hours of 500-level courses towards the MS degree if certain requirements are met. For more information, please visit (<https://www.winthrop.edu/graduateschool/master-of-science-in-biology.aspx>).

Freshman Year

Fall (17 credits)	Spring (15 credits)
ACAD 101 (1) WRIT 101 (3) BIOL 202 (1) BIOL 220 (3) and BIOL 270 (2) ^a CHEM 201 (4) or 211 (4) MATH 150 or 151 (3)	HMXP 102 (3) BIOL 221 (3) and BIOL 271 (2) ^a CHEM 202 (4) ^b and 204 (2) PESH (1)

^aSEA-PHAGES labs 270 and 271 are 2 credits each and are strongly encouraged since they are research labs. If you are accepted into this program students should take 220 in their first semester.

^bCHEM 202 is only required if CHEM 201 is taken; if CHEM 211 is taken, CHEM 202 is not required.

Sophomore Year

Fall (17 credits)	Spring (17-18 credits)
CRTW 201 (3) BIOL 300 (4) MATH 241: Quantitative requirement (3) Gen Ed elective (3) BIOL 307/308/321: Area D (4)	BIOL 316 (3) or BIOL 317 (4)* Gen Ed Elective (3) Gen Ed Elective (3) Foreign Language 101 (4) BIOL 315 or 320: Area B (4)*

Junior Year

Fall (18-19 credits)	Spring (14 credits)
BIOL 310 or 311: Area C (4)* BIOL Elective Area A (3-4) BIOL 390 (0.5) CHEM 301 (4) Foreign Language 102 (4) MATH 105 or 201 (3)	BIOL 490 (0.5) CHEM 302 (3) and 304 (1) BIOL 522 (or other): Area B and 500 level requirement (4) Gen Ed elective (3) Gen Ed elective (3) BIOL 450H or 471 (3)

*At least one of these options must be a lab course.

Senior Year

Fall (16 credits)	Spring (13-16 credits)
BIOL 480 (3) Gen Ed Elective (3) Gen Ed elective (3) Gen Ed Elective (3) PHYS 201 or 211 with lab (4)	Gen Elective (3) CHEM 323(3) or 520 (3) or 523/525 (5) BIOL Elective Area A, B, C or D (3-4) PHYS 202 or 212 with lab (4)