



COLLEGE OF LETTERS AND SCIENCES Major Planning Guide
Biological Sciences MAJOR, Pre-Biomedical Professions EMPHASIS, Bachelor of Science

Not an official document. Refer to Advising Report for full requirements.
Sample Advising Reports available on-line <http://www.uww.edu/registrar/ars/index.html>

Major Planning Guides are sample programs which illustrate the type of curriculum a student will take to complete the degree in 4 years.
All students must complete a minimum of 120 credits including

- 1) at least 32 units of general education, including specific Gened courses, as well as approved math and science, physical education and elective courses
- 2) requirements for the BA or BS Degree,
- 3) requirements for the major and for the minor if required.

* ACT/SAT scores determine which Math and English course is appropriate for you. Refer to your AR for this information and then adjust this schedule accordingly.
The Planning Guide begins with the most common placement for this major.

**The Bachelor of Science requires two lab sciences and 5 credits of advanced math or 3 of math and 3 of computer science. This Planning sheet will use MATH152 for the math requirement, and BIOL 141 and CHEM 102 for the lab science requirement..

Courses in **bold** typeface indicate specific courses that must be completed for the major. Other courses such as Gened Courses or major/minor electives can be selected from a number of course choices.

@ Requires Math 141 as co-req, or completed, or waived.

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Freshman Year	
English 101* Freshman English—3 units	Math 152* Elementary Functions – 5 units
Biology 141 Biology I @ – 5 units	Biology 142 Biology II – 5 units
Chem 102 Intro Chem I # – 5 units	Chem 104 Intro Chem II – 5 units
GENED 130 Individual and Society – 3 units	PEGNRL 192 Personal Health & Fitness—1 unit
Semester 1: 16 units	Semester 2: 16 units
Sophomore Year	
Biology 251 Intro to Genetics – 4 units	Bio 253 Intro to Cell Biology – 3 units
Biology 257 Intro to Ecology – 3 units	Biology 254 Biotech Lab Methods – 2 units
Chemistry 251 Organic Chem I - 3 units	Chemistry 252 Organic Chem II - 3 units
English 102* Freshman English—3 units	GENED120 Historical Perspectives or 140 Global Perspectives—3 units
GENED 110 World of the Arts – 3 units	COMM 110 Intro to Human Communication – 3 units
Semester 1: 16 units	Semester 2: 14 units
Junior Year	
Biology 363 Molecular Biology – 3 units	Biology selected group – 3-5 units
Biology 303 Planning and Presenting Bio Research – 4 credits	Bio elective 300* – 3-4 units
Biology selected group – 3-4 units	Biology 390 Colloquium – 0.5 unit
Bio 340 OR Bio 361 – 4 units	Bio 345 OR Bio 362 – 4 units
GENED 390 World of Ideas —3 units	Gen Ed Elective—3 units
Semester 1: 17-18 units	Semester 2: 13.5-16.5 units
Senior Year	
Bio elective 300* OR Experiential —3-4 units	Bio elective 300* OR Experiential —3-4 units
Bio elective 300* OR Experiential —3-4 units	Bio elective 300* OR Experiential —3-4 units
Physics 140 OR 180 – 5 units	Physics 141 OR 181 – 5 units
Diversity/Gen Ed Elective – 3 units	Biology 400 Colloquium – 0.5 unit
	Gen Ed Elective—3 units
Semester 1: 14-16 units	Semester 2: 14.5-16.5 units

Selected group: You must choose from the following options: **Math 253 (Calculus and Analytical Geometry – 5 units); Chem 261 Organic Chem I Lab - 2 units, Chem 262 Organic Chem II Lab - 2 units, or Bio/Chem 456 Biochemistry.**

Experiential: You must complete 1 to 6 units of one of the following: **Biology 498R, Biology 493, Biology 491 Travel Study, Biology 451 Yellowstone, or Biology 354 Field Botany.**

Bio elective 300* - Select additional units of Biology electives numbered 300 or above to total 54 units in the emphasis.