

College of Arts and Sciences 2026-2027 Degree Worksheet

B.S. BIOLOGY with Concentration in Microbiology, Molecular, and Cellular Biology (MMCB)

COLLEGE OF ARTS & SCIENCES Language Requirement

All students who major in the College of Arts & Sciences are required to demonstrate competence in a second language. For complete details:

<https://www.gonzaga.edu/college-of-arts-sciences/about/information-for-students/language-requirement-information>

Credits Sem/Yr

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UNIVERSITY CORE REQUIREMENTS: FUNDAMENTAL CORE COURSES

Year 1: Understanding & Creating

Writing	Credits Sem/Yr
ENGL 101 Writing (fulfills 3 credits Writing Enriched) [▲]	3
Reasoning	
PHIL 101 Reasoning	3
First Year Seminar	
Dept. 193	3
Communication & Speech	
COMM 100 Communication & Speech	3
Math	
MATH (must be above Math 100)	3
Scientific Inquiry (2cr + 1cr lab) *	
BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3

Year 2: Being & Becoming

Christianity & Catholic Traditions	Credits Sem/Yr
RELI (see approved list)**	3
Philosophy of Human Nature	
PHIL 201 Philosophy of Human Nature	3

Year 3: Caring & Doing

World/Comparative Religion	Credits Sem/Yr
RELI (see approved list)** (fulfills 3cr Global Studies) [♦]	3
Ethics	
PHIL 301 Ethics or RELI 330 Principles-Christian Morality	3

Year 4: Imagining the Possible

Core Integration Seminar	Credits Sem/Yr
Dept. 432	3

NOTE: some courses have pre-requisites, check the catalog carefully!

BROADENING COURSES - see approved list**

Social & Behavioral Science	Credits Sem/Yr
	3
Literature	
	3
History	
	3
Fine Arts & Design	
	3

REQUIRED COURSE DESIGNATIONS - see approved list**

Writing Enriched	Credits Sem/Yr
	9 total
Social Justice	
	3 total
Global Studies	
	6 total

****for list of approved RELI, Broadening & Designated courses, see :**
<https://my.gonzaga.edu/academics/undergraduate-programs/general-degree-requirements-procedures/university-core>

*** BIOL 105/105L meets the Scientific Inquiry requirement of the University Core for Biology Majors & Minors.**

B.S. BIOLOGY-Microbiology, Molecular, & Cellular Biology Concentration (MMCB)

LOWER DIVISION

48-49 Credits

40 credits

Course	Course Title	Credits	Grade
BIOL 111	Biology Pathways	1	
BIOL 105/105L	Info Flow in Biological Systems + Lab*	4	
BIOL 106	Energy Flow in Biological Systems	3	
BIOL 205/205L	Physiology & Biodiversity + Lab	4	
BIOL 206/206L	Ecology + Lab	4	
BIOL 207/207L	Genetics + Lab	4	
CHEM 101/101L	General Chemistry I + Lab	4	
CHEM 102/102L	General Chemistry II + Lab	4	
CHEM 230/230L	Organic Chemistry I + Lab	4	
CHEM 231/231L	Organic Chemistry II + Lab	4	
CHEM 307/307L	Biochemistry I + Lab	4	

Choose one of the following sets of courses + labs:

5 credits

PHYS 111/111L	General Physics I + Lab	5	
PHYS 121/121L	Physics I + Lab	5	

Choose one of the following Math or Statistics courses:

3-4 credits

MATH 148	Survey of Calculus	3	
MATH 157	Calculus-Analytical Geometry I	3	
MATH 221	Applied Statistics	3	
BIOL 305	Biological Data Analysis	4	

UPPER DIVISION

18 Credits

3 Credits

BIOL 399	Advanced Topics	2	
BIOL 495	Senior Evaluation	0	
BIOL 499	Senior Colloquium	1	

Biology Upper Division Electives:

15 Credits

Group A: Choose one from the following courses + labs:

BIOL 351/351L	Cell Biology + Lab	4	
BIOL 370/370L	Microbiology + Lab	4	
BIOL 456/456L	Molecular Biology + Lab	4	

Group B: Choose one from the following:

BIOL 335	Advanced Genetics	3	
BIOL 337	Developmental Biology	3	
BIOL 351/351L	Cell Biology + Lab	4	
BIOL 380	Group B approved Study Abroad	0-6	
BIOL 451/451L	Comparative Endocrinology + Lab	4	
BIOL 456/456L	Molecular Biology + Lab	4	
BIOL 498	Group B Approved Research	4	

Group C: Choose one from the following:

BIOL 331	Parasitology	3	
BIOL 370/370L	Microbiology + Lab	4	
BIOL 374	Immunology	3	
BIOL 375	Virology	3	
BIOL 380	Group C approved Study Abroad	4	
BIOL 498	Group C Approved Research	4	

Choose at least three credits from the following to complete the required 15 credits of Biology Upper Division electives:

BIOL 301-498, incl. listed above, not used	
CHEM 300 and higher	
CPSC 121 and higher	
MATH 148 and higher, if not used above	
PHYS 112 and higher	

ALL courses should be chosen in consultation with a Biology faculty advisor.

Students must earn C- grade or better in BIOL 105/105L & BIOL 106 to take BIOL 205, 206, or 207. Students must get C- grade or better in BIOL 205/205L, 206/206L, 207/207L & BIOL 399 to take BIOL 499. Credits from BIOL 497 Biology Internship, do not satisfy any requirements for the Biology Major or Minor.

Upper division BIOL electives: minimum of 10 credits(BS), 6 credits(BA), 4 credits(Minor) must be taken from GU faculty. Study abroad students take note.