

College of Arts and Sciences 2024-2025 Degree Worksheet

B.S. BIOLOGY with Concentration in Evolution and Integrative Biology (EIB)

**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

UNIVERSITY CORE REQUIREMENTS:

► **FUNDAMENTAL CORE COURSES**

Year 1: Understanding & Creating

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

Year 2: Being & Becoming

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

Year 3: Caring & Doing

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

Year 4: Imagining the Possible

	Credits Sem/Yr
<i>Core Integration Seminar</i>	
Dept. 432	3

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

► **BROADENING COURSES - see approved list****

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

► **REQUIRED COURSE DESIGNATIONS - see approved list****

	Credits Sem/Yr
*Writing Enriched	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- Evolution and Integrative Biology (EIB) Concentration **60-65 CREDITS**

LOWER DIVISION

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

Choose one of the following sets of courses + labs:

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

Choose one of the following Math or Statistics courses:

MATH 121	Statistics	3	
MATH 221	Applied Statistics (MATH 148 is a pre-requisite)	3	
MATH 147	Precalculus	3	
BIOL 305	Biological Data Analysis	4	

UPPER DIVISION

24-28 Credits

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

Choose one of the following:

3-4 credits

BIOL 323/323L	Conservation Biology + Lab	4	
BIOL 334	Advanced Evolution	3	

Biology Upper Division Electives

12 Credits

**At least one course must include a lab (or BIOL 498 4cr Research).
Must select courses from two of the following three groups - A,B,C.**

Group A:

BIOL 335	Advanced Genetics	3	
BIOL 351/351L	Cell Biology + Lab	4	
BIOL 370/370L	Microbiology + Lab	4	
BIOL 374	Immunology	3	
BIOL 375	Virology	3	
BIOL 456/456L	Molecular Biology + Lab	4	
BIOL 441/441L	Advanced Physiology + Lab	4	

Group B:

BIOL 313	Animal Behavior	3	
BIOL 331	Parasitology	3	
BIOL 334	Advanced Evolution	3	
BIOL 337	Developmental Biology	3	
BIOL 340/340L	Field Botany + Lab	4	
BIOL 341/341L	Human Physiology + Lab	4	
BIOL 360/360L	Plant Biology + Lab	4	
BIOL 367/367L	Entomology + Lab	4	
BIOL 371/371L	Vertebrate Biology + Lab	4	
BIOL 441	Advanced Physiology (+441L 1cr Lab if offered)	3	
BIOL 451/451L	Comparative Endocrinology + Lab	4	

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

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Credits from BIOL 497 Biology Internship do not satisfy any requirements for the Biology Major or Minor.

Students must earn a C- grade or better in BIOL 105/105L and BIOL 106 in order to take BIOL 205, 206, or 207.

Students must also earn a C- grade or better in BIOL 205/205L, 206/206L, 207/207L & BIOL 399 in order to take BIOL 499.

Upper division BIOL electives: minimum of 10 credits(BS), 6 credits(BA), or 4 credits(Minor) must be taken from Gonzaga faculty. Students participating in study abroad programs take note.

Group C:

BIOL 303/303L Population Ecology + Lab	4	
BIOL 323/323L Conservation Biology + Lab	4	
BIOL 333 Community Ecology	3	
BIOL 342/342L Plant Population Ecology + Lab	4	
BIOL 343 Plant Community Ecology	3	
BIOL 344 GIS & Ecological Techniques (+344L 1cr Lab if offered)	3	
BIOL 357/357L Principles of Wildlife Mgmt + Lab	4	
BIOL 359/359L Studies in Biodiversity + Lab	4	
BIOL 403/403L Marine Biology + Lab	4	
BIOL 420 Physiological Ecology	3	

Additional Science electives - choose at least two: 6-9 credits

BIOL 305 Biological Data Analysis (if not used above)		
CHEM 102/102L General Chem II, and any CHEM course above 230		
CPSC 121 and higher		
MATH 148 and higher, if not used above		
PHYS 112 and higher, if not used above		