

College of Arts and Sciences 2024-2025 Degree Worksheet

B.S. BIOCHEMISTRY (ACS Approved option)

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>

B.S. BIOCHEMISTRY: ACS Approved option

71-73 CREDITS

LOWER DIVISION

42 Credits

Course	Course Title	Credits	Grade
CHEM	101 General Chemistry I	3	
CHEM	101L General Chemistry I Lab	1	
CHEM	102 General ChemistryII	3	
CHEM	102L General Chemistry Lab II	1	
CHEM	230 Organic Chemistry I	3	
CHEM	230L Organic Chemistry I Lab	1	
CHEM	231 Organic Chemistry II	3	
CHEM	231L Organic Chemistry II Lab	1	
CHEM	285 Intro to the Chemical Sciences	1	
BIOL	105 Info Flow in Biological Systems	3	
BIOL	105L Info Flow in Biological Systems Lab	1	
BIOL	106 Energy Flow in Biological Systems	3	
MATH	157 Calculus-Analytic Geometry I	4	
MATH	258 Calculus-Analytic Geometry II	4	
PHYS	121 Scientific Physics I	4	
PHYS	121L Scientific Physics I Lab	1	
PHYS	122 Scientific Physics II	4	
PHYS	122L Scientific Physics II Lab	1	

UPPER DIVISION

29-31 Credits

Course	Course Title	Credits	Grade
CHEM	305 Inorganic Chemistry	3	
CHEM	307 Biochemistry I	3	
CHEM	307L Biochemistry I Lab	1	
CHEM	308 Biochemistry II	3	
CHEM	310 Analytical Chemistry	3	
CHEM	310L Analytical Chemistry Lab	1	
CHEM	345L Advanced Biochemistry Lab	3	
CHEM	356 Thermodynamics & Kinetics	3	
CHEM	356L Thermodynamics & Kinetics Lab	1	
CHEM	399 Advanced Topic	2	
CHEM	485 Seminar	1	

One of the following options:

CHEM	488 Senior Literature Review	1	
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OR

CHEM	498A Thesis I	1	
CHEM	498B Thesis II	1	

CHEM 498A & 498B are required for ACS approved degree

One Course from CHEM 405-480

Course	Course Title	Credits	Grade
CHEM		2	

One Elective Course from the following:

Course	Course Title	Credits	Grade
CHEM	CHEM course 405-480	2	
BIOL	300-400 level approved Biology topic	3	
PHYS	300-400 level approved Physics topic	3	