

**B.A. CHEMISTRY**

**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>

**B.A. CHEMISTRY:**

**56-57 CREDITS**

**LOWER DIVISION**

**35 Credits**

Course	Course Title	Credits	Grade
CHEM 101	General Chemistry	3	<input type="text"/>
CHEM 101L	General Chemistry Lab	1	<input type="text"/>
CHEM 102	General Chemistry II	3	<input type="text"/>
CHEM 102L	General Chemistry II Lab	1	<input type="text"/>
CHEM 230	Organic Chemistry I	3	<input type="text"/>
CHEM 230L	Organic Chemistry I Lab	1	<input type="text"/>
CHEM 231	Organic Chemistry II	3	<input type="text"/>
CHEM 231L	Organic Chemistry II Lab	1	<input type="text"/>
CHEM 285	Intro to the Chemical Sciences	1	<input type="text"/>
MATH 157	Calculus-Analytic Geometry I	4	<input type="text"/>
MATH 258	Calculus-Analytic Geometry II	4	<input type="text"/>

**One of the following sets of courses and labs:**

Course	Course Title	Credits	Grade
PHYS 111/111L	General Physics I + Lab	5	<input type="text"/>
PHYS 112/112L	General Physics II + Lab	5	<input type="text"/>

**OR**

PHYS 121/121L	Physics I + Lab	5	<input type="text"/>
PHYS 122/122L	Physics II + Lab	5	<input type="text"/>

**UPPER DIVISION**

**21-22 Credits**

Course	Course Title	Credits	Grade
CHEM 305	Inorganic Chemistry	3	<input type="text"/>
CHEM 307	Biochemistry I	3	<input type="text"/>
CHEM 307L	Biochemistry I Lab	1	<input type="text"/>
CHEM 310	Analytical Chemistry	3	<input type="text"/>
CHEM 310L	Analytical Chemistry Lab	1	<input type="text"/>
CHEM 356	Thermodynamics & Kinetics	3	<input type="text"/>
CHEM 356L	Thermodynamics & Kinetics Lab	1	<input type="text"/>
CHEM 485	Seminar	1	<input type="text"/>
CHEM 488	Senior Literature Review	1	<input type="text"/>

**One course from CHEM 405-480**

Course	Course Title	Credits	Grade
CHEM		2	<input type="text"/>

**One Elective from the following**

Course	Course Title	Credits	Grade
CHEM 308	Biochemistry II	3	<input type="text"/>
CHEM	2 credits from CHEM 405-480	2	<input type="text"/>
PHYS	300 & above approved Special Topics	3	<input type="text"/>

**College of Arts and Sciences 2025-2026 Degree Worksheet**  
**B.A. CHEMISTRY - SAMPLE Yearly Progression**

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**56-57 credits required for the Major**

**Freshman**

*FALL*

Course	Course Title	Cred	Grade
CHEM	101 General Chemistry I	3	
CHEM	101L General Chemistry I Lab	1	
MATH	157 Calculus-Analytic Geometry I	4	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
		<b>17</b>	

*SPRING*

Course	Course Title	Credits	Grade
CHEM	102 General Chemistry II	3	
CHEM	102L General Chemistry II Lab	1	
MATH	258 Calculus-Analytic Geometry II	4	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
		<b>17</b>	

**Sophomore**

*FALL*

Course	Course Title	Credit	Grade
CHEM	230 Organic Chemistry I	3	
CHEM	230L Organic Chemistry I Lab	1	
CHEM	285 Introduction to the Chemical Sciences	1	
PHYS	111 General Physics I <sup>(1)</sup>	4	
PHYS	111L General Physics I Lab <sup>(1)</sup>	1	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
		<b>16</b>	

*SPRING*

Course	Course Title	Credits	Grade
CHEM	231 Organic Chemistry II	3	
CHEM	231L Organic Chemistry II Lab	1	
PHYS	112 General Physics II <sup>(1)</sup>	4	
PHYS	112L General Physics II Lab <sup>(1)</sup>	1	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
		<b>18</b>	

**Junior**

*FALL*

Course	Course Title	Credit	Grade
CHEM	310 Analytical Chemistry	3	
CHEM	310L Analytical Chemistry Lab	1	
CHEM	307 Biochemistry I	3	
CHEM	307L Biochemistry I Lab	1	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
		<b>14</b>	

*SPRING*

Course	Course Title	Credits	Grade
CHEM	4xx Special Topic (405-480) <sup>(2)</sup>	2	
CHEM	305 Inorganic Chemistry	3	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
		<b>14</b>	

**Senior**

*FALL*

Course	Course Title	Credit	Grade
CHEM	356 Thermodynamics & Kinetics	3	
CHEM	356L Thermodynamics & Kinetics Lab	1	
CHEM	485 Seminar	1	
CHEM	488 Senior Literature Review <sup>(3)</sup>	1	
	<i>CORE</i>	3	
	<i>CORE</i>	3	
	<i>CORE/Elective</i>	3	
		<b>15</b>	

*SPRING*

Course	Course Title	Credits	Grade
CHEM	4xx Special Topic (405-480) <sup>(2)</sup>	2	
	<i>CORE</i>	3	
	<i>CORE/Elective</i>	3	
	<i>CORE/Elective</i>	3	
	<i>CORE/Elective</i>	3	
		<b>14</b>	

**NOTES:**

1. Students can take Physics I and II with lab (PHYS 121/121L and PHYS 122/122L) instead of General Physics I and II.
2. Students must take one Special Topics course (CHEM 405-480) and a second upper division elective (CHEM 405-480, CHEM 308, or an approved PHYS 3XX/4XX). These may be taken in any order during 3rd & 4th years if pre-requisites are met.
3. Students must find a senior literature review or senior thesis faculty advisor by the end of spring semester junior year.