## Degree Worksheet for the College of Arts and Sciences: 2021-2022

### **B.A. CHEMISTRY**

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# **COLLEGE of ARTS & SCIENCES**

**B.A. CHEMISTRY: 55 CREDITS** Language Requirement All students who major in the College of Arts & Sciences are required to **LOWER DIVISION** 37 Credits demonstrate competence in a second language. For complete details: https://www.gonzaga.edu/college-of-arts-sciences/about/information-for-Course Course Title Credits Grade students/language-requirement-information CHEM 101 General Chemistry 3 Credits Sem/Yr CHEM 101L General Chemistry Lab 1 CHEM 205 Inorganic Chemistry 3 CHEM 230 Organic Chemistry I 4 CHEM 230L Organic Chemistry I Lab 1 3 **UNIVERSITY CORE REQUIREMENTS:** CHEM 231 Organic Chemistry II CHEM 231L Organic Chemistry II Lab ► FUNDAMENTAL CORE COURSES 1 Year 1: Understanding & Creating CHEM 245 Biochemistry 3 Writing Credits Sem/Yr CHEM 245L Biochemistry Lab 1 CHEM 270 Career Development I ENGL 101 Writing (fulfills 3 credits Writing Enriched)\* 3 1 Reasoning MATH 157 Calculus-Analytic Geometry I 4 3 PHIL 101 Reasoning MATH 258 Calculus-Analytic Geometry II 4 First Year Seminar Dept. 193 3 One of the following sets of two courses: Communication & Speech Course Course Title Credits Grade 3 PHYS 101 General Physics I COMM 100 Communication & Speech PHYS 102 General Physics II Math 3 **MATH** (must be above Math 100) OR Scientific Inquiry (2cr + 1cr lab) PHYS 103 Scientific Physics I BIOL or CHEM or PHYS 104/104L (taken year 1 or 2) 3 PHYS 204 Scientific Physics II 4 Year 2: Being & Becoming Credits Sem/Yr Christianity & Catholic Traditions RELI (see approved list)\*\* **UPPER DIVISION** 18 Credits 3 Course Title Philosophy of Human Nature Credits Grade Course PHIL 201 Philosophy of Human Nature 3 CHEM 310 Analytical Chemistry 3 Year 3: Caring & Doing CHEM 310L Analytical Chemistry Lab World/Comparative Religion Credits Sem/Yr CHEM 355 Physical Chemistry 3 (see approved list)\*\* (fulfills 3cr Global Studies)\* CHEM 355L Physical & Inorganic Chemistry Lab RELI 3 1 CHEM 370 Career Development II **Ethics** 1 PHIL 301 Ethics or RELI 330 Principles-Christian Morality CHEM 399 Advanced Topic 2 CHEM 485 Seminar Year 4: Imagining the Possible 1 Core Integration Seminar Credits Sem/Yr CHEM 488 Senior Literature Review 1 NOTE: some courses have pre-requisites, check the catalog carefully! One Course in CHEM 405-435 (Block 1) **▶ BROADENING COURSES -** see approved list\*\* Course Course Title Credits Grade Social & Behavioral Science Credits Sem/Yr CHEM 2 3 Literature 3 One Course in CHEM 455-480 (Block 2) Credits Grade History Course Course Title 3 **CHEM** Fine Arts & Design 3 ► REQUIRED COURSE DESIGNATIONS - see approved list\*\* \*Writing Enriched Credits Sem/Yr 9 total

3 total

Social Justice

\*Global Studies

<sup>6</sup> total \*\*for list of approved RELI, Broadening & Designated courses, see : https://my.gonzaga.edu/academics/undergraduate-programs/general-degree-

**FALL** 

## College of Arts and Sciences: 2021-2022 B.A. CHEMISTRY - **SAMPLE** Yearly Progression

Freshman

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#### 55 credits required for the Major

**SPRING** 

**SPRING** 

Course Title

CORE (4)

CORE (4)

CORE (4)

CHEM xxx<sup>(6)</sup> Advanced Topic/Special Topic

CHEM xxx<sup>(6)</sup> Advanced Topic/Special Topic

Credit: Grade

2

2

3

3

3

13

,,,,,			<i>5, 1,,,</i> <b>1</b>	
Course	Course Title	Credit Grade	Course Course Title	Credit: Grade
CHEM	101 General Chemistry	3	CHEM 230 Organic Chemistry I	4
CHEM	101L General Chemistry Lab	1	CHEM 230L Organic Chemistry I Lab	1
MATH	157 Calculus-Analytic Geometry I	4	MATH 258 Calculus-Analytic Geometry II	4
	CORE (1)	3	CORE (1)	3
	CORE (1)	3	CORE (1)	3
		14		15
		Sophomore		
FALL			SPRING	
Course	Course Title	Credit: Grade	Course Course Title	Credit: Grade
CHEM	231 Organic Chemistry II	3	CHEM 270 Career Development I	1
CHEM	231L Organic Chemistry II Lab	1	CHEM 310 Analytical Chemistry	3
CHEM	205 Inorganic Chemistry	3	CHEM 310L Analytical Chemistry Lab	2
	CORE (2)	3	CORE (2)	3
	CORE (2)	3	CORE (2)	3
	CORE (2)	3	CORE (2)	3
		16		15
		Junior		
FALL			SPRING	
Course	Course Title	Credit: Grade	Course Course Title	Credit: Grade
CHEM	245 Biochemistry	3	CHEM 370 Career Development II	1
CHEM	245L Biochemistry Lab	1	CHEM xxx <sup>(6)</sup> Advanced Topic/Special Topic	2
PHYS	103 <sup>(5)</sup> Scientific Physics I	4	PHYS 204 (5) Scientific Physics II	4
	CORE (3)	3	CORE (3)	3
	CORE (3)	3	CORE (3)	3
		14		13
		Senior		

#### **NOTES:**

**FALL** 

Course

Course Title

CHEM 355 Physical Chemistry

CHEM 488 Senior Literature Review

CHEM 355L Physical & Inorganic Chemistry Lab

CHEM 485 Seminar

CORE (4)

CORE (4)

1. Students must take the First Year Seminar (DEPT 193) in their first year, and they are encouraged to take COMM 100, PHIL 101, and ENGL 101 in their first year.

Credit: Grade

1

1

3

1

3

3

12

- 2. Students are encouraged to complete the 2nd year Core courses in their second year.
- 3. Students are encouraged to complete the 3rd year Core courses in their third year.
- 4. Students are encouraged to complete the Core Integration Seminar (DEPT 432) in their fourth year.
- 5. Students may take the PHYS 101/102 sequence instead of the PHYS 103/204 sequence.
- 6. Students must complete one Advanced Topic (CHEM 399) course, one Special Topic-Block 1 (CHEM 405-435) course, and one Special Topic-Block 2 (CHEM 455-480) course.