Degree Worksheet for the College of Arts and Sciences: 2019-2020 B.A. CHEMISTRY

Paae 1 of 2 **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 **UNIVERSITY CORE REQUIREMENTS:** 3 CHEM 231 Organic Chemistry II FUNDAMENTAL CORE COURSES CHEM 231L Organic Chemistry II Lab 1 Year 1: Understandina & Creatina CHEM 245 Biochemistry 3 Credits Sem/Yr CHEM 245L Biochemistry Lab 1 Writing CHEM 270 Career Development I 1 ENGL 101 Writing (fulfills 3 credits Writing Enriched)* 3 Reasoning MATH 157 Calculus-Analytic Geometry I 4 PHIL 101 Reasoning 3 MATH 258 Calculus-Analytic Geometry II 4 First Year Seminar 3 Dept. 193 One of the following sets of two courses: Communication & Speech Course Title Course Credits Grade COMM 100 Communication & Speech 3 PHYS 101 General Physics I 4 PHYS 102 General Physics II 4 Math MATH (must be above Math 100) 3 OR Scientific Inquiry (2cr + 1cr lab) PHYS 103 Scientific Physics I 4 BIOL or CHEM or PHYS 104/104L 3 PHYS 204 Scientific Physics II (taken year 1 or 2) Year 2: Being & Becoming Christianity & Catholic Traditions Credits Sem/Yr 3 UPPER DIVISION **18 Credits** RELI (see approved list)** Philosophy of Human Nature Course Title Course Credits Grade PHIL 201 Philosophy of Human Nature 3 CHEM 310 Analytical Chemistry 3 Year 3: Caring & Doing CHEM 310L Analytical Chemistry Lab 2 World/Comparative Religion Credits Sem/Yr CHEM 355 Physical Chemistry 3 CHEM 355L Physical & Inorganic Chemistry Lab 1 RELI (see approved list)** (fulfills 3cr Global Studies)* 3 CHEM 370 Career Development II 1 Ethics CHEM 399 Advanced Topic PHIL 301 Ethics or RELI 330 Principles-Christian Morality 3 2 Year 4: Imagining the Possible CHEM 485 Seminar 1 Core Integration Seminar CHEM 488 Senior Literature Review Credits Sem/Yr 1 Dept. 432 3 NOTE: some courses have pre-requisites, check the catalog carefully! One Course in CHEM 405-435 (Block 1) BROADENING COURSES - see approved list** Course Title Credits Grade Course Credits Sem/Yr Social & Behavioral Science CHEM 2 3 Literature 3 One Course in CHEM 455-480 (Block 2) History Course Course Title Credits Grade 3 CHEM 2 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-degreerequirements-procedures/university-core

College of Arts and Sciences: 2019-2020 B.A. CHEMISTRY - <u>SAMPLE</u> Yearly Progression

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(55 credits required for Major)

Freshman

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FALL		SPRING	
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	Credite	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									
Junior									
FALL				SPRING					
Course	Course Title	Credit	Grade	Course Course Title	Credits	Grade			
CHEM	245 Biochemistry	3		CHEM 370 Career Development II	1				
CHEM	245L Biochemistry Lab	1		CHEM xxx ⁽⁶⁾ Advanced Topic/Special Topic	2				
PHYS	103 ⁽⁵⁾ 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									
FALL				SPRING					
Course	Course Title	Credit	Grade	Course Course Title	Credite	Grade			
CHEM	485 Seminar	1		CHEM xxx ⁽⁶⁾ Advanced Topic/Special Topic	2				
CHEM	488 Senior Literature Review	1		CHEM xxx ⁽⁶⁾ Advanced Topic/Special Topic	2				
	355 Physical Chemistry	3		CORE ⁽⁴⁾	3				
CHEM	355L Physical & Inorganic Chemistry Lab	1		CORE ⁽⁴⁾	3				
	CORE ⁽⁴⁾	3		CORE ⁽⁴⁾	3				
	CORE ⁽⁴⁾	3			13				
		12							

NOTES:

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.

- 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.