

Degree Guide for the College of Arts and Sciences: 2017-2018

B.A. CHEMISTRY

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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 see: <http://www.gonzaga.edu/Academics/Colleges-and-Schools/College-of-Arts-and-Sciences/Majors-Programs/language-requirement->

Credits Sem/Yr

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UNIVERSITY CORE REQUIREMENTS:

► FUNDAMENTAL CORE COURSES

Year 1: Understanding & Creating

Writing
ENGL 101 Writing (fulfills 3 credits Writing Enriched)* Credits Sem/Yr
3

Reasoning
PHIL 101 Reasoning 3

First Year Seminar
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
RELI (see approved list)** Credits Sem/Yr
3

Philosophy of Human Nature
PHIL 201 Philosophy of Human Nature 3

Year 3: Caring & Doing

World/Comparative Religion
RELI (see approved list)** (fulfills 3cr Global Studies)* Credits Sem/Yr
3

Ethics
PHIL 301 Ethics or RELI 330 Principals-Christian Morality 3

Year 4: Imagining the Possible

Core Integration Seminar
492 Credits Sem/Yr
3

NOTE: some courses have pre-requisites, check the catalogue 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 :

<http://www.gonzaga.edu/Academics/Undergraduate/General-Degree-Requirements-and-Procedures/University-Core/Default.asp>

B.A. CHEMISTRY:

53 CREDITS

MAJOR LOWER DIVISION

29 Credits

Course	Course Title	Credits	Grade
CHEM 101	General Chemistry	3	<input type="checkbox"/>
CHEM 101L	General Chemistry Lab	1	<input type="checkbox"/>
CHEM 205	Inorganic Chemistry	3	<input type="checkbox"/>
CHEM 230	Organic Chemistry I	4	<input type="checkbox"/>
CHEM 230L	Organic Chemistry I Lab	1	<input type="checkbox"/>
CHEM 231	Organic Chemistry II	3	<input type="checkbox"/>
CHEM 231L	Organic Chemistry II Lab	1	<input type="checkbox"/>
CHEM 245	Biochemistry	3	<input type="checkbox"/>
CHEM 245L	Biochemistry Lab	1	<input type="checkbox"/>
CHEM 270	Career Development I	1	<input type="checkbox"/>
MATH 157	Calculus-Analytic Geometry I	4	<input type="checkbox"/>
MATH 258	Calculus-Analytic Geometry II	4	<input type="checkbox"/>

One of the following sets of two courses:

Course	Course Title	Credits	Grade
PHYS 101	General Physics I*	3*	<input type="checkbox"/>
PHYS 102	General Physics II*	3*	<input type="checkbox"/>

OR

PHYS 103	Scientific Physics I*	3*	<input type="checkbox"/>
PHYS 204	Scientific Physics II*	3*	<input type="checkbox"/>

MAJOR UPPER DIVISION

18 Credits

Course	Course Title	Credits	Grade
CHEM 310	Analytical Chemistry	3	<input type="checkbox"/>
CHEM 310L	Analytical Chemistry Lab	2	<input type="checkbox"/>
CHEM 355	Physical Chemistry	3	<input type="checkbox"/>
CHEM 355L	Physical & Inorganic Chemistry Lab	1	<input type="checkbox"/>
CHEM 370	Career Development II	1	<input type="checkbox"/>
CHEM 399	Advanced Topic	2	<input type="checkbox"/>
CHEM 485	Seminar	1	<input type="checkbox"/>
CHEM 488	Seminar Literature Review	1	<input type="checkbox"/>

Special Topics in Chemistry or Biochemistry CHEM 405-435 (Block 1)

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

Special Topics in Chemistry or Biochemistry CHEM 455-480 (Block 2)

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

***NOTE: required number of credits for these courses for the major differ from actual course credits.**

College of Arts and Sciences: 2017-2018
B.A. CHEMISTRY - SAMPLE YEARLY PROGRESSION

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(53 credits required for Major)

Freshman

<i>FALL</i>				<i>SPRING</i>			
Course	Course Title	Credits	Grade	Course	Course Title	Credits	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

<i>FALL</i>				<i>SPRING</i>			
Course	Course Title	Credits	Grade	Course	Course Title	Credits	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

<i>FALL</i>				<i>SPRING</i>			
Course	Course Title	Credits	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

<i>FALL</i>				<i>SPRING</i>			
Course	Course Title	Credits	Grade	Course	Course Title	Credits	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	
CHEM	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					
12				13			

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 492*) in their fourth year.
5. Students may take the *PHYS 101/102* sequence instead of the *PHYS 103/204* sequence.

**NOTE: required number of credits for these courses differ from actual course credits*

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.