# 2022-2023

# Degree Map: Chemistry (BA)\*

# **Chemistry Program**

School of Natural Sciences & Mathematics | Stockton University USC 1 - 240 | 609-652-4546

The following is a **suggested** plan of study for completion of this degree program.

The goal of a Degree Map is to ensure that students graduate with no more than 128 credits and in four years.

- All students should speak with their preceptor about their academic programs.
- Transfer students may not need to take all courses in the plan; they should consult with an academic advisor.

FIRST YEAR - FALL	Credit	FIRST YEAR - SPRING	Credit	
Course load	17	Course load	18	
Subject: FRST or G-course	4	Subject: FRST or G-course	4	
Optional Attribute: Seminar and a W1	4	Attribute: A, H, I, R, and/or V	4	
Subject: FRST or G-course	4	Subject: ASD or G-course		
Attribute: W1 OR W2	4	Attribute: A, H, I, R, and/or V	4	
Subject: G-course	4	CHEM 2120/2125 CHEM II Organic Structure	_	
Attribute: A, H, I, R, and/or V	4	w/lab¹	5	
CHEM 2110/2115 CHEM I General Principles		MATH 2215 Coloubus I**		
w/lab¹	5	MATH 2215 Calculus I**	5	
Attribute: Q2		Attribute: Q1		

SECOND YEAR - FALL	Credit	SECOND YEAR - SPRING	Credit
Course load	18	Course load	17
Subject: G-course Attribute: A, H, I, R, and/or V	4	Subject: G-course Attribute: A, H, I, R, and/or V	4
MATH 2216 Calculus II Attribute: Q1	5	Subject: ASD or G-course  Attribute: A, H, I, R, and/or V	4
CHEM 2130 CHEM III Organic Reactions <sup>1</sup>	4	CHEM 2140 CHEM IV Theory & Application <sup>1</sup> Attribute: Q2	4
PHYS 2110/2115 Physics for Life Sciences I w/lab Attribute: Q1	5	PHYS 2120/2125 Physics for Life Sciences II w/lab Attribute: Q1	5

THIRD YEAR - FALL	Credit	THIRD YEAR - SPRING	Credit
Course load	18	Course load	14
Subject: G-course	4	Subject: G-course	4
Attribute: A, H, I, R, and/or V	4	Attribute: A, H, I, R, and/or V	4
Subject: ASD or G-course	4	CHEM 3320 Lab Methods II 3,5	-
Attribute: A, H, I, R, and/or V	4	Attribute: Q2, W2	3
CHEM 3310 Lab Methods I 3,4	4	CHEM 3420 Physical Chemistry II <sup>3,5</sup>	4
Attribute: Q2	4	Attribute: Q2, W2	4
CHEM 3410 Physical Chemistry I <sup>4</sup>	4	CHEM 3025 Organic Techniques <sup>3,5</sup>	1
Attribute: Q2	4	Cheivi 3023 Organic Techniques	1
CHEM 4600 Chemistry Seminar <sup>2,4</sup>	2		

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FOURTH YEAR - FALL	Credit	FOURTH YEAR - SPRING	Credit
Course load	12	Course load	14
Subject: ASD or G-course	4	Subject: G-course	4
Attribute: A, H, I, R, and/or V		Attribute: A, H, I, R, and/or V	
Subject: ASD or G-course	4	Subject: ASD or G-course	4
Attribute: A, H, I, R, and/or V		Attribute: A, H, I, R, and/or V	
CHEM 3110 Inorganic Chemistry <sup>3,4</sup>	4	Subject: ASD or G-course	4
Chew 3110 morganic chemistry		Attribute: A, H, I, R, and/or V	4
CHEM 4800 Research <sup>6</sup>	0	CHEM 4810 Senior Thesis <sup>6</sup>	2

#### **GRADUATION REQUIREMENT TRACKER**

G-course	✓
GAH	
GAH	
GEN	
GIS	
GNM	
GNM	
GSS	
GSS	

Quantitative	✓
Reasoning	
Q1 (First year)	
Q1/Q2	
Q2	

Writing	✓
Requirement	
W1 (First year)	
W1/W2	
W1/W2	
W1/W2 (3000 level	
or higher)	

At-some-distance	<b>✓</b>
ASD	
ASD	
ASD	
ASD	

Attributes	✓
A	
Н	
I	
R1	
R2	
V	

## **ADDITIONAL INFORMATION**

- FIRST (FRST). All newly admitted freshmen or transfer students with 15 or fewer credits are required to fulfill the University's first-year competency requirement. The requirement may be met by demonstrating competency on the placement tests, or by passing, with a grade of C or better, all FRST courses: FRST 1101 College Writing, 1002 Critical Thinking and Reading, and 1103 Quantitative Reasoning into which students have been placed. Students enrolled in FRST 1100 Developmental Mathematics must receive a grade of C or better, and then enroll in and receive a grade of C or better in FRST 1103 to demonstrate competency. Full-time students must register for all required FRST courses in their first semester. Depending on time to completion of competency requirements, some students may need additional time for degree completion. *Note-* certain FRST courses also meet the requirements of the General Studies course distribution categories.
- **General Studies.** B.A. students must complete 64 credits of General Studies with the distribution requirement of: 8 GAH, 4 GEN, 4 GIS, 8 GNM, 8 GSS and 32 ASD (At Some Distance). See 2021-2022 Bulletin for more information. **A** "**G**" course may fulfill multiple attributes.
- **W1/W2- Writing requirement.** Students are required to complete (C or better) four Writing intensive (WI/W2) courses. One W1 is required in the first year and an additional three W1 or W2 with one in the upper-level division (3000-level or higher). W1/W2 courses can be found in General Studies or Program/cognate courses depending on major.
- Q1/Q2- Quantitative Reasoning. Students are required to complete (C or Better) three Q1/Q2 courses. One Q1 in the freshman year and at least one Q2. Q1/Q2 courses may be found in General Studies or Program/cognate course depending on major.
- R1/R2- Race and Racism. Students are required to pass one (1) R1 and one (1) R2 courses. R1/R2 courses may be found in General Studies or Program/cognate courses depending on major.
- **Minor program.** Students may select a Minor program of study, in consultation with their preceptor. Minor courses would replace some of the ASD or Program/cognate courses in the Degree Map.

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• The 25% Rule Transfer students must take 25% of their remaining credits in General Studies with a GIS required. Depending on transferred courses, individual requirements may be met (AHVI/Q, W and R) but will be evaluated on transfer.

### **Include Program specific notes**

- \*A grade of C- or higher must be earned in all CHEM courses. Students must have a minimum overall 2.0 GPA for CHEM courses and for all NAMS courses. CHEM 2110/2115 and CHEM 2120/2125 are not included when calculating the CHEM GPA. No chemistry core or cognate course may be taken P/NC and be counted toward any degree track in chemistry.
- \*\*Dependent on first-year math competency placement. There are several variations possible in the selection and sequence of courses in the junior and senior years. Since flexibility is based on preparation, it is important to complete Calculus I & II as early as possible.
- It is important to note that at Stockton, Chemistry I and IV are 'General Chemistry' while CHEM II and CHEM III are 'Organic Chemistry'; thereby students may proceed to CHEM II or IV after taking CHEM I with lab.
- <sup>2</sup>Students are encouraged to enroll in Chemistry Seminar before their senior year.
- 3All transfer students must complete a minimum of 16 credits in Stockton Chemistry courses at the 3000-level (except CHEM 3800, 3900, 3940, 4800, 4810, or 4900) regardless of how many credits were accepted when students transferred. One course must be a laboratory intensive course (CHEM 3110, 3310, 3320, 3350, 3420 or CHEM 3025).
- 4Course only offered in fall semesters.
- 5Course only offered in spring semesters.
- 6No more than 8 credits of research may be counted toward meeting chemistry degree requirements.