College of Natural Sciences and Mathematics

DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY

CHEMISTRY BACHELOR OF ARTS

CLASS OF 2022

NAME:

Chemistry B.A.

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6	TERM 7	TERM 8
GE B1 & B3 CHEM 120A 5 units	CHEM 120B 5 units	CHEM 301A 3 units	CHEM 301B 3 units	CHEM 361A 3 units	CHEM 361B 3 units	CHEM 421 3 units	CHEM Elective 3 units
GE B4 MATH 150A 4 units	MATH 150B 4 units	CHEM 306A 2 units	CHEM 306B 2 units	CHEM 325 3 units	GE B2 3 units	CHEM 495 1 unit	CHEM 495 2 units
GE A1 or A2 3 units	GE A1 or A2 3 units	CHEM 315 3 units	CHEM 316 2 units	GE D2 3 units	GE D1 3 units	GE D3 3 units	GE C1 3 units
CNSM 101 3 units	GE C3 3 units	PHYS 211, 211L 4 units	PHYS 212, 212L 4 units	UD writing 3 units	Elective 3 units	Elective 3 units	Elective 3 units
CHEM 190 1 unit		GE A3 3 units	GE C2 3 units	UD GE B5 3 units	UD GE C4/Z 3 units	Elective 3 units	GE E/Z 3 units
						UD GE D4/Z 3 units	
16 units	15 units	15 units	14 units	15 units	15 units	16 units	14 units

33	GE lower division
9	GE upper division
3	Upper division writing
44	Chemistry BA required
3	CNSM required
16	Chemistry BA related
12	Elective
120	**TOTAL UNITS**

INSTRUCTIONS FOR COMPLETING THE CHEMISTRY BACHELOR OF ARTS

1. Meet with your assigned faculty advisor each semester to plan and review your academic progress.
2. Visit your College of Natural Sciences and Mathematics Student Success Team in MH 488 to review GE and graduation requirements.
3. Complete GE courses in areas A1, A2, A3 and B4 with a C or better.
4. Complete a total of 12 units in GE Area B.
5. One course from GE Area Z can also fulfill a requirement in categories C4, D4 or E. Check your Titan Degree Audit for courses that appear in both categories.
6. Apply for Graduation through your Student Center at the start of Term 7.

Revised 30 October 2018

CHEMISTRY BACHELOR OF ARTS

The Bachelor of Arts in Chemistry is offered for students who are planning careers that require a sound background in fundamental chemistry, but not specialized training needed by a professional chemist. The B.A. program is particularly suited for those who plan to go into areas such as secondary education, technical sales, food processing, chemical patent law, forensic science, environmental law, and business administration (MBA). The B.A. degree can also be used to pursue graduate school.

The following courses are required to complete the B.A. in Chemistry.

CHEMISTRY REQUIRED COURSES

• Complete the **fourteen** courses listed below:

Course	Course Title
CHEM 120A	General Chemistry
CHEM 120B	General Chemistry
CHEM 190	Orientation to Chemistry & Biochemistry
CHEM 301A	Organic Chemistry
CHEM 301B	Organic Chemistry
CHEM 306A	Organic Chemistry Lab
CHEM 306B	Organic Chemistry Lab
CHEM 315	Theory of Quantitative Chemistry
CHEM 316	Quantitative Chemistry Laboratory
CHEM 325	Inorganic Chemistry
CHEM 361A	Introduction to Physical Chemistry
CHEM 361B	Introduction to Physical Chemistry
CHEM 421	Biological Chemistry
CHEM 495	Senior Research

• Complete **three** units of upper division CHEM electives; choose from:

Course	Course Title
CHEM410	Computational Chemistry
CHEM411A-G	Instrumental Analysis (1 unit each)
CHEM422	Biochemistry Laboratory
CHEM425	Advanced Inorganic Chemistry
CHEM429	Medicinal Chemistry
CHEM430	Bioorganic Chemistry
CHEM431	Advanced Organic Chemistry
CHEM436	Atmospheric Chemistry
CHEM438	Environmental Biochemistry
CHEM445	Nutritional Biochemistry
CHEM472B	Advances in Biotechnology Laboratory
CHEM467	Medicinal Chemistry Laboratory
CHEM480T	Topics in Chemistry

• Complete the **six** courses listed below:

Course	Course Title
MATH 150A	Calculus I
MATH 150B	Calculus II
PHYS 211	Elementary Physics
PHYS 211L	Elementary Physics: Laboratory
PHYS 212	Elementary Physics
PHYS 212L	Elementary Physics: Laboratory

• Complete **one** course listed below to satisfy the University Upper Division writing requirement:

Course	Course Title
ENGL 301	Advanced College Writing
ENGL 360	Technical Writing
ENGL 363	Scientific Writing

GENERAL EDUCATION REQUIREMENTS

• **Area A**. Complete one course in each subarea for a total of 9 units of lower division.

Subarea	Title
A1	Oral Communication
A2	Written Communication
A3	Critical Thinking

• **Area B**. Complete one course in each subarea; the course in B3 must be associated with the course taken to satisfy B1 or B2. Area B courses must include 9 lower division and 3 upper division units (*).

Subarea	Title
B1	Physical Science
B2	Life Science
B3	Laboratory Activity
B4	Mathematics/Quantitative Reasoning
B5 (*)	Implications/Explorations in Math and Natural Sciences

• Area C. Complete one course in each subarea for a total of 9 lower division and 3 upper division units (*).

Subarea	Title
C1	Arts: Arts, Cinema, Dance, Music, Theatre
C2	Humanities: Literature, Philosophy, Languages other than English
C3	Origins of World Civilization
C4 (*)	Explorations in the Arts/Humanities

• Area D. Complete 9 lower division and 3 upper division units (*).

Area	Title
D1	Social Sciences
D2	American History
D3	American Government
D4 (*)	Explorations in Social Sciences

• Area E. Complete 3 upper division units (*).

Area	Title
E (*)	Lifelong Learning and Self Development

• Area Z. Cultural Diversity Requirement (3 units). Choose an appropriate upper division course from GE Area C4, D1, D4 or E (check TDA for courses that appear in both categories).

Area	Title
Z	Cultural Diversity