



Office of
Transfer Relations

Catalog: 2026-2027 University of Wyoming Catalog
Program: Chemistry, B. S.

Wyoming Transfer Alignment Guide (WyoTAG)

Chemistry, B. S.

The Bachelor of Science program (B.S.) provides an intensive study of chemistry appropriate for those pursuing careers in the chemical sciences.

University Studies Program

This degree requires that The University Studies Program 2015 requirements are met before graduation. Some of the courses required for this major fulfill USP requirements, but not all. Students should check their degree evaluations and consult with their assigned academic advisor to discuss their specific course plan.

Course Name	Credits	UW Course in Major	AA/AS/AB/ADN satisfies this USP
C 1-Communication 1 (COM1)	3		
C 2-Communication 2 (COM2)	3		
C 3-Communication 3 (COM3)	3	(Must be completed at UW)	
Q-Quantitative Reasoning (U5Q)	3		
PN-Physical and Natural World (1) (PN)	3		
PN-Physical and Natural World (2) (PN)	3		
H-Human Culture (1) (H)	3		
H-Human Culture (2) (H)	3		
V-US & WY Constitution (V)	3		
FYS or USP Elective-Any 3-credit hour of FYS or 3-credit hours of USP electives	3		

Note: FYS courses have been paused. 3 hours from any additional USP designated courses is still required.

Plan 1 (42 hours of chemistry)

Course Requirements

Course Name	Credits	
CHEM 4930 - Undergraduate Research	1-3	UW course

Students need to complete 2 credit hours of CHEM 4930 total

Additional upper-division chemistry credits: 3

Plan 1 Course Requirements Continued

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
MATH 2200 - Calculus I Q	4	x	x	x	x	x	x	x
MATH 2205 - Calculus II Q	4	x	x	x	x	x	x	x
MATH 2210 - Calculus III	4	x	x	x	x	x	x	x

Electives Credits: 44

Plan 1**Basic Chemistry: 37 Hours**

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
CHEM 1050 - Advanced General Chemistry I PN AND CHEM 1060 - Advanced General Chemistry II PN OR CHEM 1020 - General Chemistry I PN AND CHEM 1030 - General Chemistry II PN	8	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1
CHEM 2230 - Quantitative Analysis	5	x	x				x	
CHEM 2420 - Organic Chemistry I	4	x	x	x	x	x	x	x
CHEM 2440 - Organic Chemistry II	4	x	x	x	x	x	x	x

Course Name	Credits	
CHEM 4000 - Career Skills	3	UW course
CHEM 4100 - Advanced Inorganic Chemistry Laboratory Course	2	UW course
CHEM 4110 - Introductory Inorganic Chemistry	3	UW course
CHEM 4507 - Introduction to Quantum Mechanics	3	UW course
CHEM 4508 - Thermodynamics and Kinetics	3	UW course
CHEM 4525 - Physical Chemistry Lab I	1	UW course
CHEM 4530 - Physical Chemistry Laboratory II	1	UW course

Plan 1 PHYS: 8 Hours

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
PHYS 1310 - College Physics I PN AND PHYS 1320 - College Physics II PN OR PHYS 1210 - Engineering Physics I PN AND PHYS 1220 - Engineering Physics II PN	8	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2

Plan 2 (CACS) (46 hours of chemistry)**Course Requirements**

Course Name	Credits	
CHEM 4930 - Undergraduate Research	1-3	UW course

Students need to complete 3 credit hours of CHEM 4930 total

Additional upper-division chemistry credits: 2-3

Plan 2 Course Requirements Continued

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
MATH 2200 - Calculus I Q	4	x	x	x	x	x	x	x
MATH 2205 - Calculus II Q	4	x	x	x	x	x	x	x
MATH 2210 - Calculus III	4	x	x	x	x	x	x	x

Electives Credits: 4-6

Plan 2**Basic Chemistry: 45-46 Hours**

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
CHEM 1050 - Advanced General Chemistry I PN AND CHEM 1060 - Advanced General Chemistry II PN OR CHEM 1020 - General Chemistry I PN AND CHEM 1030 - General Chemistry II PN	8	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1
CHEM 2230 - Quantitative Analysis	5	x	x				x	
CHEM 2420 - Organic Chemistry I	4	x	x	x	x	x	x	x
CHEM 2440 - Organic Chemistry II	4	x	x	x	x	x	x	x

Course Name	Credits	
CHEM 4400 - Biological Chemistry OR MOLB 3610 - Principles of Biochemistry OR MOLB 4600 - Advanced Biochemistry	3-4	UW course
CHEM 4000 - Career Skills	3	UW course
CHEM 4100 - Advanced Inorganic Chemistry Laboratory Course	2	UW course
CHEM 4110 - Introductory Inorganic Chemistry	3	UW course
CHEM 4230 - Instrumental Methods of Chemical Analysis	5	UW course
CHEM 4507 - Introduction to Quantum Mechanics	3	UW course
CHEM 4508 - Thermodynamics and Kinetics	3	UW course
CHEM 4525 - Physical Chemistry Lab I	1	UW course
CHEM 4530 - Physical Chemistry Laboratory II	1	UW course

Plan 2 PHYS: 8 Hours

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
PHYS 1310 - College Physics I PN AND PHYS 1320 - College Physics II PN OR PHYS 1210 - Engineering Physics I PN AND PHYS 1220 - Engineering Physics II PN	8	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2

Plan 2 Computer Science: 3 Hours

Course Name	Credits	Casper	CWC	EWC	LCCC	NWCCD	Northwest	Western
STAT 2050 - Fundamentals of Statistics Q	4	x	x	x	x	x	x	x
CHEM 4515 - Applied Mathematics in Physical Chemistry I	3							
COSC 1010 - Computational Thinking and Programming	3	x	x	x	x	x	x	x

Program Supporting Courses: 18 Hours

A group of courses selected to further the career objectives of the individual student. These are chosen after consultation with the departmental adviser and must subsequently be approved by the departmental Undergraduate Studies Committee. A grade of C- or higher is required for all program supporting courses.

Minimum Total: 120 Hours

Additional Requirements

The BS in chemistry requires a minimum of 42 hours of chemistry.

See the “Prerequisite and MPE Cut Score Reference Chart” on the Math Placement website for the most up-to-date math placement equivalencies: <http://www.uwyo.edu/mathstats/math-placement/>.

Students taking CHEM 4010 or MICR 4321 as their C3 are not required to take CHEM 4000.m

NOTES

Note 1: All Wyoming community colleges offer both CHEM 1020 & CHEM 1030.

Note 2: All Wyoming community colleges offer both required Physics sequences (PHYS 1310 & PHYS 1320 or PHYS 1210 & PHYS 1220).

COURSE SUBSTITUTIONS: WyoTAGs reflect published equivalencies. UW academic departments occasionally arrange for course substitutions when indirect equivalencies exist. Please contact your UW Academic Advisor for details.

EFFECTIVE DATE: This document is in effect as of the 2026-2027 catalog year; it reflects the published UW curriculum as of that date. Any changes to the UW curriculum or the WYCC course equivalents will require this document to be updated. To request an updated document, faculty should contact transfer@uwyo.edu via email.