## **COLLEGE OF SCIENCE**

## **Chemistry, BS** 2024-2025 Catalog | catalog.uah.edu

Completed	Course Number	Credits	Course Name	Semester Usually Offered
			Charger Foundations Charger Foundations	
			Area I: Freshman Composition 3-6 credits	
	EH 101 & EH 102	6	College Writing I & II*	FA/SP/SU
	EH 103	3	Accelerated College Writing*	SP
	EH 105	3	Honors English Seminar*	FA
		3	Area II: Humanities and Fine Arts 12 credits Fine Art	FA/SP/SU
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		3	Literature	FA/SP/SU
		3	Non-Literature Humanity	FA/SP/SU
		3	Humanities/Fine Arts/Literature	FA/SP/SU
			Area III: Mathematics and Sciences 11-12 credits	
	MA 171, 171S, or		Mathematics 4 credits  Calculus I*	
	MA 150 & 151	4	Calculus I with Foundations A & B*	FA/SP/SU
			Natural Sciences (Lab) 8 credits	
	PH 111/114	3/1	General Physics w/ Calculus I + Lab	FA/SP/SU
	PH 112/115	3/1	General Physics w/ Calculus II + Lab	FA/SP/SU
			Area IV: History and Social & Behavioral Sciences 12 credits	
		3	History	FA/SP/SU
		3	Social & Behavioral Science	FA/SP/SU
		3	Social & Behavioral Science	FA/SP/SU
		3	History/Social & Behavioral Science	FA/SP/SU
		3	Area V: Pre-Professional	TA/31/30
			For Chemistry Majors 24 credits	
	FYE 101S	1	Charger Success - Science	FA
	CM 113	3	Public Speaking	FA/SP/SU
	MA 172	4	Calculus II	FA/SP/SU
	BYS 119/121	3/1	Principles of Biology + Lab	FA/SP/SU
	BYS 120/122 BYS 219/221	3/1	Organismal Biology + Lab Genetics and Evolution + Lab	FA/SP/SU FA/SP/SU
	BYS 300/300L	4	Cell & Developmental Biology + Lab	FA/SP/SU
			Major Requirements	
			Chemistry Core 22 credits	
	CH 121M/125M	3/1	General Chemistry I + Lab	FA/SP/SU
	CH 123/126	3/1	General Chemistry II + Lab	FA/SP/SU
	CH 223/224	3/1	Quantitative Analysis + Lab	FA/SP/SU
	CH 331/335	3/1	Organic Chemistry I + Lab	FA/SP/SU
	CH 332	3	Organic Chemistry II	FA/SP/SU
	CH 401	3	Inorganic Chemistry	FA
-		•	Chemistry Required Courses 15 credits	
	CH 336	1	Organic Chemistry II Lab	FA/SP/SU
	CH 345	1	Experimental Physical Chemistry	FA
	CH 361	3	General Biochemistry	FA/SP/SU
	CH 421/422		· · · · · · · · · · · · · · · · · · ·	
	one sequence:	3/1	Instrumental Analysis + Lab	FA
	CH 341	3	Physical Chemistry I	FA
	& CH 342	3	Physical Chemistry II	SP
	CH 347	3	Biophysical Chemistry	FA
	& CH 348	3	Biophysical Chemistry II  General Electives	SP

Elective courses can be taken from any department and do not have to be taken in your major or minor.

Total = 120+ credits to graduate

36 of the 120 credits must be taken at 300-level or higher.
All prerequisite classes must be completed with a "C-" or higher grade.
The Catalog is the final authority for all degree requirements.
\*Placement Requirements: https://www.uah.edu/admissions/undergraduate/admitted-students/academic-placement

Charger Foundations Choices						
I. Freshman Composition	Choose 1	College Writing I & II (EH 101 & 102) or (EH 101 + 1 Honors English Seminar (EH 105; equivalent to EH Accelerated College Writing (EH 103: equivalent to	101 & EH 102)			
II. Fine Arts	Choose 1	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) World Art (ARH 103) Introduction to Drawing (ARS 160) Intro to Film Studies (FMA 123) Intro to Music Literature (MU 100) Theatre Appreciation (TH 122)				
II. Humanities (Literature)	Choose 1	Readings Literature/Culture I (EH 207) Readings Literature/Culture II (EH 208) Literature Without Borders (EH 241) Mythology (EH 242)	Protest Literature (EH 243) Heroes &/or Monsters (EH 244) Love &/or Romance (EH 245) Speculative Realities (EH 246)			
II. Humanities (Non-Literature)	Choose 1	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) World Art (ARH 103) Introduction to Drawing (ARS 160) Ancient & Medieval Worlds (AMS 229) Public Speaking (CM 113) Intro to Film Studies (FMA 123) Intro to Music Literature (MU 100) Intro to Philosophy (PHL 101)	Intro to Philosophy (PHL 101) Intro to Ethics (PHL 102) Intro to Logic (PHL 103) Science, Tech & Human Values (PHL 150) Theatre Appreciation (TH 122) Intro to Women's Studies (WGS 200) Foreign Language (WLC 101) International Cinema (WLC 204)			
III. Mathematics	$\rightarrow$	Calculus I MA 171 or 171S or MA 150 & 151				
III. Natural Sciences (Lab) Sequence	$\rightarrow$	General Physics w/ Calculus I (PH 111/114) General Physics w/ Calculus II (PH 112/115)				
IV. History	Choose 1	World History I (HY 103) World History II (HY 104)	United States to 1877 (HY 221) United States Since 1877 (HY 222)			
IV. Social & Behavioral Sciences	Choose 2	World Geography (AES 105) Human Geography (AES 110) Global systems & Cultures (GS 200) Macroeconomics (ECN 142) Microeconomics (ECN 143) American Gov't (PSC 101) Politics & Foreign Govt (PSC 102)	International Relations (PSC 260) General Psychology (PY 101) Life Span Development (PY 201) Intro to Sociology (SOC 100) Analysis of Social Problems (SOC 102) Intro to Criminology (SOC 103)			
Students must take one literature and one history course. Students must also take either a second literature or history course to complete a sequence.						
Area II Sequence		iterature <b>AND</b> History or Social & Behavioral Science	iso to complete a sequence.			
OR						
Area IV Sequence	Take a 2 <sup>nd</sup> H	istory <b>AND</b> Fine Arts or Non-Literature Humanities or	Literature Humanities			

Optional Concentrations Offered
Biochemistry Concentration
Pure Chemistry Concentration
Chemical Business Concentration
Chemical Physics Concentration
Environmental Chemistry Concentration
Please work with your Academic Advisor to determine substitute/additional courses to take if you are interested in a degree with a specific