

## **COLLEGE OF SCIENCE**



## **Chemistry, BS** Biochemistry Concentration 2022-2023 Catalog | catalog.uah.edu

mpleted	Course Number	Credits	Course Name	Prerequisites, Corequisites and/or Prerequisites with Concurrency*	Semester Usua Offered
			Charger Foundat		
			Area I: Freshman Composition 3-6 credits -	- see attached for more options	
	EH 101	3	College Writing I	<u>Placement</u> *	FA/SP/SU
	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
	EH 103	3	Accelerated College Writing	Placement*	SP
	EH 105	3	Honors English Seminar	Honors	FA
	211 100	, and a	Area II: Humanities and Fine		.,,,
		3	Fine Art	See attached for choices	
			-		
		3	Literature	Completion of Area I	
		3	Non-Literature Humanity	See attached for choices	
	*	3	Humanities/Fine Arts/Literature	See attached for choices	
			Area III: Mathematics and Scie	nces 11-12 credits	
			Mathematics 4 cr	edits	
	MA 171	4	Calculus A	Placement* or MA 113 or MA 115	FA/SP/SU
			Natural Sciences (Lab	·	
	PH 111/114	3/1	General Physics w/ Calculus I + Lab	MA 171	FA
	· · · · · · · · · · · · · · · · · · ·			MA 171 MA 171	SP
Ш	PH 112/115	3/1	General Physics w/ Calculus II + Lab		31
			Area IV: History and Social & Behavi		
		3	History	See attached for choices	
		3	Social & Behavioral Science	See attached for choices	
		3	Social & Behavioral Science	See attached for choices	
	*	3	History/Social & Behavioral Science	See attached for choices	
_			Area V: Pre-Profes		
_			For Chemistry Majors		
	FYE 101S	1	Charger Success - Science	REQUIRED	FA
	CM 113	3	Public Speaking		FA/SP/SU
	MA 172	4	Calculus B	MA 171	FA/SP/SU
			Major Requirem	ents	
			Chemistry Core 22		
	CH 121/125	3/1	General Chemistry I + Lab	Placement* or CH 101	FA/SP/SU
			· · · · · · · · · · · · · · · · · · ·		
	CH 123/126	3/1	General Chemistry II + Lab	CH 121	FA/SP/SU
	CH 223/224	3/1	Quantitative Analysis + Lab	CH 126	FA/SP
	CH 331/335	3/1	Organic Chemistry I + Lab	CH 123	FA/SP/SU
	CH 332	3	Organic Chemistry II	CH 331	
	CH 401	3	Inorganic Chemistry	CH 332	FA
			Biochemistry Concentration Require		
	CH 336	1	Organic Chemistry Lab II	CH 335	
		-			ГА
	CH 345	1	Experimental Physical Chemistry I	CH 223/224	FA
	CH 346	1	Experimental Physical Chemistry II	CH 345, prereq w/ conc: CH 342 or 348	SP
	CH 347	3	Biophysical Chemistry I	CH 332, MA 172, PH 112/115	FA
	CH 348	3	Biophysical Chemistry II	CH 347	SP
	CH 361/362	3/1	General Biochemistry + Lab	(BYS 120, CH 332, 335) or (BYS 331, CH 332, 335)	
	CH 363/364	3/1	General Biochemistry II + Lab	CH 361	SP
	CH 402	1	Inorganic Chemistry Lab	CH 401 w/ conc	SP
		-			
	CH 421	4	Instrumental Analysis	CH 341 or CH 347	FA
	CH 491	1		Senior standing (91+ credit hours). Approval of	
	or CH 492	2	Intro to Chemical Research	supervising faculty member and Chemistry Chair.	FA/SP/SU
	or CH 493	3		supervising faculty member and enemistry chair.	
			Minor Requirem	ents	
			Required Biology Mino		
	BYS 119/121	3/1	Principles of Biology + Lab		FA/SP/SU
	BYS 120/122	3/1	Organismal Biology + Lab	DV9.449.499.494.494	FA/SP/SU
	BYS 219/221	3/1	Genetics and Evolution + Lab	BYS 119, 120, (CH 101 or 121), and (MA 107 or 112)	FA/SP/SU
	BYS 300/300L	4	Cell & Developmental Biology + Lab	BYS 219 and (CH 123 or 201)	FA/SP/SU
	BYS 300+ course				
Choose o	one:				
	BYS 430	4	Immunology	BYS 219, 300, 321, prereq w/ conc: CH 361	SP
	BYS 464	3	Evolution	BYS 120, 219, prereq w/ conc: BYS 300	
ш	D13 404	ا ا			FA
		=1 .	General Electiv		
		Elective cou	urses can be taken from any department and do		
			Total = 120+ credits to	graduate	
			Total - TEOT Cicuits to	graduate	



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		Charger Foundations Choice	s		
I. Freshman Composition	Choose 1	College Writing I & II (EH 101 + 102) Intensive Writing & Studio & Freshman Comp II (EH 101S + 101L & EH 102) Honors English Seminar (EH 105; equivalent to EH 101 & EH 102) Accelerated College Writing (EH 103: equivalent to EH 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) Honors Literature/Culture I (EH 209) Honors Literature/Culture II (EH 210) 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 A (MA 171)			
III. Natural Sciences (Lab) Sequence	$\longrightarrow$	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)		
	Student	Students must take one literature and one s must also take either a second literature or history			
Area II Sequence					
<u>OR</u>		,			
Area IV Sequence	Area IV Sequence Take a 2 <sup>nd</sup> History AND Fine Arts or Non-Literature Humanities or Literature Humanities				