



Chemistry, BS

Chemical Physics Concentration 2025-2026 Catalog | catalog.uah.edu

mpleted	Course Number	Credits	Course Name	Semester Usually Offered
			Charger Foundations	
			Area I: Freshman Composition 3-6 credits	EA (CD (CL)
	EH 101 & EH 102	6	College Writing, I & II*	FA/SP/SU
	EH 103	3	Accelerated College Writing*	SP FA
EH 105 3 Honors English Seminar* Area II: Humanities and Fine Arts 12 credits				
		3	Fine Art	FA/SP/SU
		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	
			Mathematics 4 credits	
	MA 171, 171S, or	4	Calculus I*	FA/SP/SU
	MA 150 & 151		Calculus I with Foundations A & B*	
	PH 111/114	3/1	Natural Sciences (Lab) 8 credits General Physics w/ Calculus I + Lab	FA/SP/SU
	PH 112/115	3/1	General Physics w/ Calculus II + Lab	FA/SP/SU
	111112/113	5/1	Area IV: History and Social & Behavioral Sciences 12 credits	17/31/30
		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
			Area V: Pre-Professional	
			Additional Requirements 26 credits	
	FYE 101S	1	Charger Success - Science	FA
	CM 113	3	Public Speaking	FA/SP/SU
	MA 172 MA 201	4	Calculus II Calculus III	FA/SP/SU FA/SP/SU
	MA 201 MA 238	3	Applied Differential Equations	FA/SP/SU
	MA 244	3	Intro to Linear Algebra	FA/SP/SU
	BYS 119/121	4	Principles of Biology + Lab	FA/SP/SU
	BYS 120/122	4	Organismal Biology + Lab	FA/SP/SU
			Major Requirements	
			Chemistry Core 22 credits	
	CH 121/125	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
	CH 331/335	3/1	Organic Chemistry I + Lab	FA/SP/SU
	CH 332 CH 401	3	Organic Chemistry II Inorganic Chemistry	FA/SP/SU FA
	CH 401	3	Chemical Physics Concentration Required Courses 29-31 credits	FA
	CH 336	1	Organic Chemistry Lab II	FA/SP/SU
	CH 341	3	Physical Chemistry I	FA
	CH 342	3	Physical Chemistry II	SP
	CH 345	1	Experimental Physical Chemistry I	FA
	CH 346	1	Experimental Physical Chemistry II	SP
	CH 402	1	Inorganic Chemistry Lab	SP
	CH 421/422	3/1	Instrumental Analysis + Lab	FA
	CH 491, 492 or 493	1-3	Intro to Chemical Research	FA/SP/SU
			Minor Requirements	
			Required Physics Minor 20 credits	
	PH 110	3	Frontiers in Science	FA
	PH 113/116	3/1	General Physics III + Lab	FA/SP
	PH 251 PH 431	1	Special Relativity Intermediate Electricity & Magnetism I	FA/SP FA
	PH 431 PH 432	3	Intermediate Electricity & Magnetism I Intermediate Electricity & Magnetism II	SP
	PH 432 PH 451	3	Intermediate Electricity & Magnetism II	FA
	PH 452	3	Intro to Quantum Mechanics I	SP
			General Electives	51
			Elective courses can be taken from any department and do not have to be taken in your major o	r minor
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			Total = 120+ credits to graduate	



COLLEGE OF SCIENCE



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		Charger Foundations C	hoices			
Freshman Composition	Choose 1	College Writing, I & II (EH 101 & 102) Honors English Seminar (EH 105; equivalent to EH 101 & EH 102) Accelerated College Writing (EH 103: equivalent to EH 101 & EH 102)				
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)				
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)			
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 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)			
Mathematics	Choose 1	Calculus I* (MA 171 or MA 171S) or Calculus I with Foundations A & B (MA 150 & MA 151)				
Natural Sciences (Lab) Sequence	Required	General Physics w/ Calculus I (PH 111/114) General Physics w/ Calculus II (PH 112/115)				
History	Choose 1 or 2	World History I (HY 103) World History II (HY 104)	United States to 1877 (HY 221) United States Since 1877 (HY 222)			
Social & Behavioral Sciences	Choose 2 or 3	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		udents must take one literature and take <u>either</u> a second literature <u>or</u> h	d one history course. istory course to complete a sequence.			
	Take a 2 nd Literature AND History or Social & Behavioral Science					
	Take a 2 nd History AND Fine Arts or Non-Literature Humanities or Literature Humanities					