

CHEMISTRY PATHWAY, A.S.

School of Science, Technology, Engineering & Mathematics

The Associate of Science degree in Chemistry introduces students to fundamental principles so that students will leave GHC's courses with a thorough understanding of the scientific method and its implementation, major chemical processes, laboratory skills, and the technical experience required to be successful in any number of career or educational pathways. This degree pathway prepares students for careers and/or further degree opportunities in chemistry, pharmacy, research, education, medicine, and many other related/technical fields or continue towards a Bachelor of Science in Environmental and Natural Resources at GHC.

To qualify for graduation, students must meet all graduation requirements (<http://catalog.highlands.edu/academic-information/#graduationrequirements>).

Code	Title	Hours	Completed
A. Essential Skills			
ENGL 1101	English Composition I	3	_____
ENGL 1102	English Composition II	3	_____
Select one of the following or a mathematics course for which one of the following is a prerequisite:		3	_____
MATH 1113	Precalculus		_____
B. Institutional Options			
COMM 1100	Human Communication	2-3	_____
or COMM 1110 Public Speaking			_____
Select one of the following:		2	_____
GHHU 2901	Special Topics: Humanities		_____
GHMA 2901	Special Topics: Mathematics		_____
GHSC 2901	Special Topics: Science		_____
GHSS 2901	Special Topics: Social Science		_____
C. Humanities/Fine Arts			
Select one of the following:		3	_____
ENGL 2111	World Literature I		_____
ENGL 2112	World Literature II		_____
ENGL 2121	British Literature I		_____
ENGL 2122	British Literature II		_____
ENGL 2131	American Literature I		_____
ENGL 2132	American Literature II		_____
ENGL 2135	Latino Literature		_____
ENGL 2140	African-American Literature		_____
Select one of the following:		3	_____

ARTS 1100	Art Appreciation	_____
ARTS 1111	Art History to Renaissance	_____
ARTS 1112	Art History Renaissance to Pre	_____
ENGL 2010	Humanities in Drama	_____
ENGL 2111	World Literature I	_____
ENGL 2112	World Literature II	_____
ENGL 2121	British Literature I	_____
ENGL 2122	British Literature II	_____
ENGL 2131	American Literature I	_____
ENGL 2132	American Literature II	_____
ENGL 2135	Latino Literature	_____
ENGL 2140	African-American Literature	_____
FILM 1100	Film Appreciation	_____
FILM 2700	History of Motion Pictures	_____
HUMS 2011	Studies In Humanities	_____
MUSC 1100	Music Appreciation	_____
PHIL 2010	Introduction to Philosophy	_____
RELI 1116	Intro to Religion	_____
SPAN 1001	Elementary Spanish I	_____
SPAN 1002	Elementary Spanish II	_____
SPAN 2001	Intermediate Spanish I	_____
SPAN 2002	Intermediate Spanish II	_____
THEA 1100	Theater Appreciation	_____
D. Science, Mathematics, and Technology		
<i>Science/Mathematics Pathways</i>		
Select one two-course science sequence of the following:		8
BIOL 1107K & BIOL 1108K	Principles of Biology I and Principles of Biology II	_____
PHYS 1111K & PHYS 1112K	Introductory Physics I and Introductory Physics II	_____

CHEM 1211 & 1211L & CHEM 1212 & CHEM 1212L	Principles of Chemistry I and Principles of Chemistry I Lab and Principles of Chemistry II and Principles of Chemistry II Lab		
PHYS 2211K & PHYS 2212K	Principles of Physics I and Principles of Physics II		
MATH 2261	Calculus I	4	
E. Social Sciences			
POLS 1101	American Government	3	
HIST 2111	American History I	3	
or HIST 2112	American History II		
Select one of the following:		3	
HIST 1111	World Civilization to 1500		
HIST 1112	World Civ Since 1500		
HIST 1121	Western Civilization I		
HIST 1122	Western Civilization II		
Select one of the following:		3	
ECON 2105	Principles of Macroeconomics		
HIST 1111	World Civilization to 1500		
HIST 1112	World Civ Since 1500		
HIST 1121	Western Civilization I		
HIST 1122	Western Civilization II		
HIST 2111	American History I		
HIST 2112	American History II		
HIST 2154	Minorities in U.S. History		
HIST 2400	Economic History		
POLS 2401	Intro to Global Issues		
POLS 2501	Intro to Domestic Issues		
PSYC 1101	Intro to General Psychology		
RELI 1116	Intro to Religion		
SOCI 1101	Introductory Sociology		
SOCI 1160	Intro to Social Problems		

F. Courses Related to the Pathway

CHEM 1211 & 1211L	Principles of Chemistry I and Principles of Chemistry I Lab ²	4	
CHEM 1212 & 1212L	Principles of Chemistry II and Principles of Chemistry II Lab ²	4	
Area D excess hours		2	
Select from the following to complete 18 hours in Area F:		8-14	
CHEM 2401K	Fund. Organic Chemistry I		
CHEM 2402K	Fund. Organic Chemistry II		
MATH 2262	Calculus II		
MATH 2263	Calculus III		
PHYS 1111K	Introductory Physics I		
PHYS 1112K	Introductory Physics II		
PHYS 2211K	Principles of Physics I		
PHYS 2212K	Principles of Physics II		
Institutional Requirements Outside the Core			
PHED 1010	Concepts of Fitness/Health	2	
Additional two credit hours of physical education		2	
Total Hours		64	

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Mathematics course for which MATH 1113 Precalculus is a prerequisite

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Required if not taken in Area D

Students in the chemistry pathway should consult an academic advisor to coordinate selection of courses in areas A, D, & E to ensure timely completion of degree requirements.