

Thomas Harriot College of Arts and Sciences B.S. in Biochemistry, Concentration in Chemistry

This 4-year plan is designed for students who start by taking MATH 1065 with CHEM 1150.

The BS degree in biochemistry offers a rich combination of chemistry and biology studies at the undergraduate level. The Concentration in Chemistry for the BS degree is rooted in structural biochemistry and emphasizes the dynamics of biochemically important systems. This chemistry-focused degree can prepare students for work in the pharmaceutical and drug discovery industry, and serve as a foundation for graduate study in chemistry, biochemistry, biotechnology, pharmacology, and more. It is also an exceptional choice for pre-medical, pre-dental, and other pre-professional students.

FRESHMAN YEAR

Fall Semester		Spring Semester	
CHEM 1150, 1151 (Gen Chem I)	3,1	CHEM 1160, 1161 (Gen Chem II)	3,1
MATH 1065 (College Algebra)	3	MATH 1083 (Functions)	3
ENGL 1100 (College Writing)	3	HLTH 1000 (Health)	2
BIOL 1100, 1101 (Gen Biol I)	3,1	BIOL 1200, 1201 (Gen Biol II)	3,1
Social Science	3	Humanities	3
	17		16

SOPHOMORE YEAR

CHEM 2750, 2753 (Organic Chem I)	3,1	CHEM 2760, 2763 (Organic Chem II)	3,1
MATH 2171 (Calculus I)	4	MATH 2172 (Calculus II)	4
ENGL 2201 (Writing / Disciplines)	3	PHYS 2350, 1251 (Univ Physics I)	4,1
KINE 1000 (Physical Activity)	1	Fine Arts	3
Social Science	3		16
	15		

JUNIOR YEAR

CHEM 3250, 3251 (Quant. Analysis)	3,2	CHEM 3950/3951 (Phys Chem I)	4,1
MATH 2173 (Calculus III)	4	Electives*	3
PHYS 2360, 1261 (Univ Physics II)	4,1	Restricted Elective**	3
	14	Social Science	3
			14

SENIOR YEAR

CHEM 3960, 3961 (Phys Chem II)	4,1	BIOL 4890, 4891 (Biochemistry II)	3,1
BIOL 4880 (Biochemistry I)	3	Restricted Elective**	4
Electives*	3	Humanities/Fine Arts	3
Restricted Elective**	3	Social Science, Humanities, Fine Arts, Science, or Math	3
	14		14

A 3 s.h. Global Diversity course and a 3 s.h. Domestic Diversity course are also required (these can coincide with other general education or major courses)

* An elective can be any courses in any department. Consider taking prerequisites for graduate or professional schools when this degree plan lists "electives".

** Choose 10 s.h. of restricted electives from the following list: CHEM 3450, 3451, 4350, 4351, 4522, 4550, 5760; BIOL 2300, MATH 3331; up to 3 s.h. of research in biology or chemistry (BIOL 3550, 4504, 4514, 4550, CHEM 4505, 4506, 4507, 4515, 4516, 4517)

CHEMISTRY@ECU.EDU



Total hours completed: 120
Updated: 8/2023
Confirmed: JT

