



2024-2025

## CHEMISTRY MAJOR, B.A.

Science & Health Department; Shaw School of Sciences

Chemistry is a branch of the physical sciences involving the study of matter and its changes. It focuses on the composition, characteristics, changes, and uses of substances and energy. It also explores the benefits and dangers of those substances to people. The chemistry major provides students with experience in each of the sub disciplines of chemistry: inorganic, organic, analytical, biological and physical. Employment opportunities in chemistry are excellent. Qualified, creative graduates find employment in many areas, including teaching, research in virtually any industry, law enforcement, healthcare, or in environmental science. Excellent fellowships and assistantships are available for those going on to graduate school.

*To graduate must complete all major requirements, foundational requirements, and additional electives needed for 124 hour minimum degree requirement.*

### **MAJOR REQUIREMENTS (64)**

#### **Cross-Disciplinary Requirements (29)**

__ 3	BIO	201	General Biology I	
__ 3	BIO	202	General Biology II	
__ 1	BIO	203	General Biology Lab I	
__ 1	BIO	204	General Biology Lab II	
__ 2	BIO	341	Ethical Issues	
__ 4	MAT	181	Calculus I	__ Lab
__ 4	MAT	182	Calculus II	__ Lab
__ 4	PHY	201	Intro Physics I	__ Lab
__ 4	PHY	202	Intro Physics II	__ Lab
__ 3	PSY	315	Stats for Behavioral Science	

#### **Chemistry Requirements (35)**

__ 3	CHE	121	Gen College Chemistry I	
__ 3	CHE	122	Gen College Chemistry II	
__ 1	CHE	123	Gen College Chemistry Lab I	
__ 1	CHE	124	Gen College Chemistry Lab II	
__ 3	CHE	221	Organic Chemistry I	
__ 3	CHE	222	Organic Chemistry II	
__ 1	CHE	223	Organic Chemistry Lab I	
__ 1	CHE	224	Organic Chemistry Lab II	
__ 4	CHE	321	Analytical Chemistry	__ Lab
__ 3	CHE	361	Biochemistry	
__ 1	CHE	363	Biochemistry Lab	
__ 3	CHE	382	Inorganic Chemistry	
__ 1	CHE	399	Intro to Chem Research	
__ 2	CHE	400	Senior Research	
__ 4	CHE	421	Physical Chemistry	__ Lab
__ 1	CHE	475	Senior Seminar	

#### **PLUS FOUNDATIONS REQUIREMENTS (49)**

(3 hours Math and 4 hours Science satisfied by required major courses.)

#### **Plus electives needed for the 124 hour degree requirement (11)**