



2020-2021

BIOCHEMISTRY MAJOR, B.A.

Science & Health Department; College of Arts and Sciences

Biochemistry is an interdisciplinary major that focuses on the interface between biology and chemistry. It combines basic courses in biology, chemistry, and physics with advanced courses in chemical instrumentation, cell and molecular biology, and biochemistry. This whole area constitutes one of the most active and exciting areas in science as scientists seek to understand the molecular basis of life. Students who major in biochemistry usually go on to graduate school in biochemistry, molecular biology, or various related fields of study. Another possible goal is an M.D. or PhD degree for someone interested in medical research. It also offers preparation for chemists in entry level positions in industry or research.

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

MAJOR REQUIREMENTS (72)

__ 3	BIO	201	General Biology I	
__ 1	BIO	203	General Biology Lab I	
__ 3	BIO	202	General Biology II	
__ 1	BIO	204	General Biology Lab II	
__ 2	BIO	341	Ethical Issues	
__ 3	BIO	372	Cell & Molecular Biology	
__ 1	BIO	374	Cell & Molecular Biology Lab	
__ 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	
__ 4	CHE	201	Organic Chemistry I	__ Lab
__ 4	CHE	202	Organic Chemistry II	__ Lab
__ 4	CHE	321	Analytical Chemistry	__ Lab
__ 3	CHE	322	Chemical Instrumentation	__ Lab
__ 4	CHE	371	Biochemistry	__ Lab
__ 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

Choose one:

__ 4	BIO	352+354	Physiology	__ Lab
	BIO	272+274	Principles Plant Biology	__ Lab

Choose one:

__ 3	BIO	322	Genetics	
	BIO	379	Immunology	

Take:

__ 1	BIO/CHE 399	Intro to Research
__ 2	BIO/CHE 400	Senior Research
__ 1	BIO/CHE 475	Senior Seminar

Choose one:

__ 4	CHE	421	Physical Chemistry I	__ Lab
	CHE	422	Physical Chemistry II	__ Lab

PLUS FOUNDATIONAL REQUIREMENTS (43)

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

Plus electives needed for the 124 hour degree requirement (9)