



2019-2020

## 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

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

Choose one:

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

Choose one:

__ 3	BIO	322	Genetics
	BIO	379	Immunology

### PLUS FOUNDATIONAL REQUIREMENTS (42)

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

**Plus electives needed for the 124 hour degree requirement (10)**