



## Biochemistry

**Degree Awarded:** Bachelor of Science

**Requirements for the Major:** 66-71 credits

This major prepares students for the rapidly advancing field of biochemistry. It is designed to appeal to students who desire a major with a focus in chemistry that also offers preparation in computer science, mathematics, physics and the biological aspects of chemistry. The interdisciplinary nature of the biochemistry major equips students for work in a variety of industries including pharmaceuticals and agriculture. Research, which is a requirement of the biochemistry major, prepares students for careers in private industry and government laboratories. The Biochemistry major also provides preparation for graduate or professional school.

Transfer credit for Biology, Chemistry, Physics and Mathematics courses must have been taken within the last 5 years. Courses taken previously to the 5 years will be considered on a case by case basis.

### Requirements for the Major:

#### Essential Competencies-Outcome Iterations

**\*\*Transfer courses do not receive outcome iterations\*\***

			CI	IL	W	O	Q	GA	V
BIOL 101	General Biology I	4	x		x				
BIOL 360	Genetics	4					x	x	
BIOL 380	Cell Biology	4					x		
BIOL 415	Molecular Biology	4							
CHEM 111	General Chemistry I	4	x				x		
CHEM 112	General Chemistry II	4							
CHEM 321	Organic Chemistry I	5							
CHEM 322	Organic Chemistry II	5				x			
CHEM 341	Quantitative Analysis	4					x		
CHEM 351	Biochemistry	3							
CHEM 450	Senior Seminar	2		x	x	x			
CHEM 452	Advanced Biochemistry	3						x	
CHEM 453	Biochemical Techniques	3							x
CHEM 499	Research in Chemistry	3		x	x				x
MATH 212 or MATH 231 or STAT 241 or STAT 261	Applied Calculus or Calculus with Analytic Geometry I or Principles of Statistics or Applied Statistics	3 or 5 or 4 or 3		x			x x x x	x	
PHYS 131 & 132 or PHYS 241 & 242	Introduction to Physics I and II or General Physics I and II	8 or 10	x (241)					x (241)	

#### Essential Competencies-Outcome Iterations

**\*\*Transfer courses do not receive outcome iterations\*\***

Choose ONE of the following:

			CI	IL	W	O	Q	GA	V
BIOL 325	Plant Physiology	4							
BIOL 335	Physiology	4							
CHEM 361	Physical Chemistry	4							
CHEM 399	Internship	3							
CHEM 430	Special Topics	3-4							

These courses will be counted in computing the 2.20 GPA for the major.

This information must be used in conjunction with the 2019-2020 Grand View University Catalog and does not reflect a student's official record of progress. Students are expected to use the Progress tool found on myView > GV Self Service when monitoring and planning coursework. Other available resources include: Course Planning Documents (found on myView under Academics) and the faculty and staff who work with academic requirements.