

# BIOCHEMISTRY MINOR

## Learning Goals and Outcomes

**Goal 1:** Students will develop an understanding of the theoretical methods and models that biochemists use to understand the properties and behavior of matter.

**Objective 1.1:** Students will gain an understanding of the key concepts fundamental to biochemistry, including, structure, metabolism, and nucleic acid chemistry.

**Objective 1.2:** Students will predict the behavior of a new substance based on the known behavior of related compounds.

**Objective 1.3:** Students will apply appropriate theoretical models to explain experimental observations.

**Objective 1.4:** Students will assess experimental data critically.

**Goal 2:** Students will gain authentic hands-on experience with the experimental methods used by chemists.

**Objective 2.1:** Students will use contemporary computer software to study problems in chemistry and present results properly and accurately using figures, graphs, and tables.

**Objective 2.2:** Students will store, handle, and use chemicals safely and responsibly.

**Objective 2.3:** Students will assess experimental data critically.

**Objective 2.4:** Students will apply appropriate theoretical models to explain experimental observations.

**Objective 2.5:** Students will use accepted laboratory record-keeping methods to record their experimental data.

## Requirements

Code	Title	Hours
CHM 120 & 120L	General Chemistry I and General Chemistry Lab I	4
CHM 125 & 125L	General Chemistry II and General Chemistry Lab II	4
CHM 210 & 210L	Organic Chemistry I and Organic Chemistry Lab I	4
CHM 215 & 215L	Organic Chemistry II and Organic Chemistry Lab II	4
CHM 341	Molecular Structure Biochemist	3
CHM 342 or CHM 343	Nucleic Acid Biochemistry Intermediary Metabolic Biochem	3
CHM 444L	Biochemistry Laboratory I	1
CHM 445L	Biochemistry Laboratory II	1
<b>Total Hours</b>		<b>24</b>