

PHARMACEUTICAL CHEMISTRY MINOR

Learning Goals and Outcomes

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

Objective 1.1: Students will gain an understanding of the key concepts fundamental to Pharmaceutical Chemistry, such as instrumental analysis and medicinal 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 330 & 330L	Instrumental Analysis and Instrumental Analysis Lab	5
One of the following:		3
CHM 411	Medicinal Chemistry	
CHM 414	Structure-Activity Relationships	
CHM 448	Computer-Aided Drug Design	
Total Hours		24