

# CHEM 350: Project-Based Laboratory: Biochemistry Lab

Using techniques relevant to biochemistry, this wet laboratory-intensive course will focus on primary literature, experimental design, data collection and analysis, and science communication. We will start by learning about a biologically important cascade (eg. blood-clotting). Next, we will develop protocols for isolating proteins from tissue and purifying them using column chromatography. Then, we will assess the purified products using polyacrylamide gel electrophoresis. Homology modeling and docking software will help us to visualize how individual components of these pathways interact at the molecular level. Finally, with homogenous proteins in hand, we will reassemble the cascade to recapitulate and probe the cascade in vitro.

**Units:** 3

**Prerequisites:**

[CHEM 150](#), [CHEM 150L](#) and IBC 200

**Program:** [Chemistry](#)