## **Biochemistry 3381A**

## PROTEIN STRUCTURE AND ENZYME FUNCTION

Students gain a deeper understanding of protein structure and folding, enzyme-mediated chemical reactions, protein regulation of networks, and methods for protein structure prediction and analysis. Students develop their ability to use computational tools to represent and analyze proteins, interpret data from primary research papers, and communicate ideas to professional audiences.

Prerequisite(s): A minimum mark of 65% in either Biochemistry 2280A or Biochemistry 2288A; a minimum mark of 60% in either Chemistry 2213A/B or Chemistry 2273A.

Pre-or Corequisite(s): It is recommended, but not required, that either Chemistry 2223B or Chemistry 2283G be taken previously.

Extra Information: 3 lecture hours, 1 seminar hour.

Course Weight: 0.50

## **Biochemistry 3382A**

## **BIOCHEMICAL REGULATION**

Among the topics discussed will be regulation of DNA replication, regulation of gene expression, epigenetic mechanisms of gene regulation, and application of regulatory principles in synthetic biology. Prerequisite(s): A minimum mark of 65% in Biochemistry 2280A; a minimum mark of 60% in either Chemistry 2213A/B or Chemistry 2273A.

Pre-or Corequisite(s): It is recommended, but not required, that either Chemistry 2223B or Chemistry 2283G be taken previously.

Extra Information: 3 lecture hours, 1 seminar hour.

Course Weight: 0.50