

DENT-170: Biochemistry

This course is designed to introduce dental students to the fundamental principles of biochemistry. The four major classes of biological macromolecules—proteins, carbohydrates, lipids, and nucleic acids—are introduced. The structure and function of enzymes are examined. Metabolic pathways will be discussed. Breakdown of amino acids for energy and to provide cellular building blocks is covered, along with a discussion of the biosynthetic pathways by which carbohydrates, fatty acids, and amino acids are made. Finally, topics such as nutrition, the response of cells to hormones (signaling), and cancer are reviewed. The hope is that this course will give students a molecular-level appreciation of how organisms and cells function.

Credits: 4

Program: Dentistry