

BIOCHEMISTRY (BIOC)

BIOC 1102. Biochemistry and Molecular Genetics. (4 Credit Hours)

The Biochemistry/Molecular Genetics course provides a description of biological structures and molecular function, providing the foundations for the basic medical sciences. Molecular structure, metabolic pathways, gene expression and human genetics will receive major emphasis in this introductory course. Case studies of metabolic and genetic disorders are presented to illustrate the implications of biochemistry, molecular biology and genetic principles for human health.

BIOC 1112. Biochemistry/Molecular Genetics. (4.5 Credit Hours)

An introductory molecular description of biological structure and function. Normal metabolism and gene expression are given the major emphasis. Several common genetic diseases and metabolic disorders serve to contrast normal and perturbed human biochemistry, as well as demonstrate the clinical implications of human biochemistry. Application exercises deepen students' understanding of Biochemical and Genetic research.

BIOC 2022. Epigenetics of Common Diseases. (0.5 Credit Hours)

The course provides an overview of the current state of research on the contributions of epigenetic factors to human health and disease. Students will review landmark publications on DNA methylation and histone modifications in common human disorders of metabolism, with special emphasis on the influence of environmental factors on epigenetic programming.