BIOCHEMISTRY (BIOC)

Courses

BIOC 095. Introductory Special Topics. 1-18 Credits.  
See Schedule of Courses for specific titles.

BIOC 096. Introductory Special Topics. 1-18 Credits.  
See Schedule of Courses for specific titles.

BIOC 185. Survey of Biochemistry. 3 Credits.  
Broad coverage of biochemical topics suitable for students in the applied health sciences. Prerequisites: CHEM 042 or acceptable coursework in organic chemistry. Cross-listed with: PBIO 185.

BIOC 187. Survey of Biochemistry: Lab. 1 Credit.  
Introduction to techniques and equipment used for the isolation and quantitative analysis of amino acids, proteins, carbohydrates and DNA enzymes in biological materials. Pre/co-requisite: BIOC 185. Cross-listed with: PBIO 187.

BIOC 191. Undergraduate Research. 1-6 Credits.  
Participation in a research program currently being pursued by a faculty member of department. Written report due at end of each semester. Prerequisites: CHEM 031, CHEM 032 or CHEM 035, CHEM 036. Some programs may require additional courses in Biology or Chemistry. Credit as arranged, up to four hours per semester.

BIOC 192. Undergraduate Research. 1-18 Credits.  
Participation in a research program currently being pursued by a faculty member of department. Written report due at end of each semester. Prerequisites: CHEM 031, CHEM 032 or CHEM 035, CHEM 036. Some programs may require additional courses in Biology or Chemistry. Credit as arranged, up to four hours per semester.

BIOC 195. Intermediate Special Topics. 1-18 Credits.  
See Schedule of Courses for specific titles.

BIOC 196. Intermediate Special Topics. 1-18 Credits.  
See Schedule of Courses for specific titles.

BIOC 205. Biochemistry I. 3 Credits.  
Introduction to chemistry and structure of biological macromolecules; examination of mechanisms of chemical processes in biological systems including enzyme catalysis, biosynthesis, regulation, and information transfer. Prerequisite: CHEM 142 or CHEM 144. Cross-listed with: CHEM 205 and MMG 205.

BIOC 206. Biochemistry II. 3 Credits.  
Continuation of Biochemistry I. Biochemistry of nucleic acids; nucleic acid based processes, such as replication and transcription; cellular information transfer, genomics, and proteomics. Prerequisite: BIOC 205. Cross-listed with: CHEM 206, MMG 206.

BIOC 207. Biochemistry Lab. 2 Credits.  
Introduction to biochemical tools, including spectrometry, chromatography, and electrophoresis; natural and recombinant enzyme isolation; assays of DNA-modifying enzymes; computer-based structure/function exercises. Co-requisite: BIOC 205 or BIOC 206. Cross-listed with: CHEM 207, MMG 207.

BIOC 212. Biochemistry of Human Disease. 3 Credits.  
Molecular approach to genetic, metabolic, and infectious diseases; recombinant DNA technology and medicine; molecular biology of cancer. Prerequisites: CHEM 042 or CHEM 141.

BIOC 240. Macromol Struct Prot&Nucl Acid. 3 Credits.  
Introduction to structural biology and macromolecular structure with an emphasis on protein-protein and protein-nucleic acids interactions. Prerequisites: BIOL 001, BIOL 002; Organic Chemistry; Junior standing recommended. Cross-listed with: MMG 240. Alternate years.

BIOC 284. Biochemistry Senior Seminar. 1 Credit.  
Oral and written presentation of a subject of current biochemical interest. Prerequisites: Audit of BIOC 381. Cross-listed with: CHEM 284, MMG 284.

BIOC 295. Advanced Special Topics. 1-18 Credits.  
See Schedule of Courses for specific titles.

BIOC 296. Advanced Special Topics. 1-18 Credits.  
See Schedule of Courses for specific titles.