**BIOCHEMISTRY - BCH**

**BCH 301 Introduction to Biochemistry**  
3 Credits  
Structure and function of biological molecules. Topics include proteins, carbohydrates, nucleic acids, lipids, enzyme kinetics, ligand binding, recombinant DNA technology and cell membrane structure and transport. Three lectures and one recitation per week.  
**Prerequisite:** minimum grade of C- in CHM 228.  
**Offered:** every fall.

**BCH 301L Introduction to Biochemistry Laboratory**  
1 Credit  
One four-hour lab per week.  
**Prerequisite:** BCH 301 (or concurrent registration).  
**Offered:** every fall.

**BCH 302 Cellular Biochemistry**  
3 Credits  
The more biological aspects of biochemistry. Topics include signal transduction, bioenergetics, metabolism of carbohydrates, lipids, proteins and metabolic control, emphasizing hormones. Three lectures and one recitation per week.  
**Prerequisite:** minimum grade of C- in BCH 301.  
**Offered:** every spring.

**BCH 401 Molecular Biology**  
3 Credits  
Biochemical processes at the cellular and molecular level. Topics include DNA structure in chromosomes, replication, repair, and recombination, DNA transcription, RNA structure and function, protein translation and regulation of these processes.  
**Prerequisite:** minimum grade of C- in BCH 301.  
**Offered:** spring of odd-numbered years.

**BCH 401L Molecular Biology Laboratory**  
1 Credit  
One four-hour lab per week.  
**Prerequisite:** BCH 301L & BCH 403 (or concurrent registration in BCH 403).  
**Fulfills College Core:** Advanced Writing-Intensive  
**Offered:** spring of odd-numbered years.

**BCH 303 Biochemistry of Viruses**  
3 Credits  
Fundamental biochemical description of the structure and properties of viruses. Topics include different types of viruses, the underlying biochemical principles for host-virus interactions, and how viruses can cause diseases.  
**Prerequisite:** BCH 301.  
**Offered:** spring of even-numbered years.

**BCH 499 Independent Study**  
3 Credits  
Independent study under the direction of the biochemistry professor. Independent studies require an application and approval by the associate dean.  
**Prerequisite:** permission of the instructor, department chair, & associate dean.  
**Offered:** fall & spring.