BIOCHEMISTRY & MOLECULAR BIOL (GBCH)

GBCH 4060 Topics in Pediatric Research (2)

GBCH 6010 Graduate Biochemistry (4)

GBCH 6020 Biochem & Molec Bio Seminar (1)

GBCH 6110 Basic Medical Biochemistry (3)

GBCH 7090 Seminar (1)

GBCH 7100 Seminar (1)

GBCH 7110 Selected Topics (1-4)

GBCH 7120 Special Problems (1-6)

GBCH 7130 Selected Topics (1-4)

GBCH 7140 Selected Topics (1-3)

GBCH 7150 Tutorial Topics (1-6)

GBCH 7160 Tutorial Topics (1-6)

GBCH 7170 Principles of Genetics (4)

GBCH 7180 Chromosome Instabil in Cancer (4)

GBCH 7190 Seminar Presentation (2)

GBCH 7220 Structure/Function Biomo (4)

GBCH 7230 Intro to Bioinformatics (3)
Prerequisite(s): GBCH 6010.

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GBCH 7250 Biomed Stats & Data Analysis (2)

GBCH 7330 Advanced Bioinformatics (3)
The goal of this course is to introduce foundational concepts, algorithms and applications of advanced bioinformatics, particularly machine learning and artificial intelligence (AI) in biomedical research. The major topics include machine learning, deep learning, and AI and their state-of-the-art applications in biomedicine. Students will acquire mathematical formulations and computer algorithms in regression modeling, data clustering and dimensionality reduction, data classifications (including deep learning), and reinforcement learning. Students will also gain detailed knowledge and hands-on experience in proteomics) and develop programming skills in applying open-source software programs in analyzing and interpreting omics data. Prerequisite: A Biochemistry course.

GBCH 7500 Human Medical Cellular Biochem (5)
The objectives and content of the Human Medical Cellular Biochemistry course are designed to provide students with a comprehensive understanding of cellular structure and function, and the manner by which cellular processes are normally integrated and regulated. This course stresses both the normal cellular function, and why disease states occur if normal cellular processes are disrupted.

GBCH 7520 Metabol Biochem Human Disease (5)

GBCH 7540 Med Biochem Grand Rnds Externs (3)

GBCH 7550 Med Biochem Grand Rounds Exter (3)

GBCH 7560 Academic Writing & Critique (2)

GBCH 7570 Signal Transduction/Hormone Ac (2)

GBCH 7580 Methods in Biochemistry (2)

GBCH 7590 Cases Research Ethics (2)

GBCH 9980 Master's Research (0)
Course may be repeated up to unlimited credit hours.

Maximum Hours: 99

GBCH 9990 Dissertation Research (0)
Course may be repeated up to unlimited credit hours.

Maximum Hours: 99