

Course Catalog - Fall 2008

Biochemistry

199 **Undergraduate Open Seminar** credit: 1 to 5 hours.
May be repeated.

406 **Gene Expression** credit: 3 hours.
Same as MCB 406. See MCB 406.

440 **Physical Chemistry Principles** credit: 4 hours.
Same as CHEM 440. See CHEM 440.

445 **Current Topics in Biochemistry** credit: 3 hours.
Capstone course of the Biochemistry Specialized Curriculum, designed to expose undergraduate seniors to developing areas of research in biochemistry. Each year the course will cover 3 to 4 topics of high current research activity, each presented by one faculty member. Readings will be based on the primary lecture. 3 undergraduate hours. Prerequisite: Senior standing in the Biochemistry Specialized Curriculum; MCB 354 and MCB 406 or consent of instructor.

446 **Physical Biochemistry** credit: 3 hours.
Physical properties of biological macromolecules, with special emphasis on proteins and nucleic acids; the use of physical methods for the characterization of such substances. Same as CHEM 472 and MCB 446. Prerequisite: CHEM 440 or CHEM 444; MCB 354 or MCB 450 or equivalent is recommended.

455 **Technqs Biochem & Biotech** credit: 4 hours.
Introduction to modern methods of experimentation with biochemical experimentation. Lectures and labs on the theory and practices underlying various methods and instrumentation. Includes protein purification and quantitative analyses, immunoassays, enzymology, protein and DNA sequencing, DNA arrays, Mass spectroscopy, and bioinformatics. Prerequisite: CHEM 232 or CHEM 236, or equivalent; credit in MCB 251 or equivalent, and BIOC 450 or MCB 354 or equivalent, or consent of instructor.

460 **Biochemistry Senior Seminar** credit: 3 hours.
Writing intensive course dealing with the technical literature, current issues, and current advances in Biochemistry. Graduate students may register, but priority will be given to undergraduate students. Prerequisite: Completion of the Campus Composition I general education requirement; MCB 354 and BIOC 455, or consent of instructor.
This course satisfies the General Education Criteria for a Advanced Composition course.

492 **Senior Thesis** credit: 2 to 6 hours.
Limited in general to seniors in biochemistry. BIOC 492 is recommended for all those who plan to do research and graduate study, and it is a prerequisite for graduation with distinction in biochemistry. Each student who desires to do thesis research must receive written permission from a member of the biochemistry faculty. Accordingly, prospective students are encouraged to contact the biochemistry staff in the term prior to registration in this course. Students must present a thesis to receive credit in this course. Registration of 10 hours over two terms is expected. No graduate credit. Prerequisite: MCB 354, MCB 406 and BIOC 455, or consent of instructor.

590 **Individual Topics** credit: 1 to 16 hours.
Designed for students in biochemistry who wish to undertake individual studies of a non-Ph.D. thesis nature under the direction of a faculty member of the department. (Summer Session, 1 to 8 hours). Approved for both letter and S/U grading. Prerequisite: Consent of head of department.

595 **Biochemistry Seminar** credit: 0 to 1 hours.
Students, faculty, and invited speakers present seminars and discussions on current research topics. Required of all Biochemistry Ph.D. students. May be repeated to a maximum of 12 hours. Approved for S/U grading only. Prerequisite: Graduate standing in Biochemistry.

599 **Thesis Research** credit: 0 to 16 hours.
Approved for S/U grading only. May be repeated.