

# BIOC - BIOCHEMISTRY

BIOC Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BIOC/>)

## Courses

**BIOC 190 Biochemistry Orientation** credit: 1 Hour. (<https://courses.illinois.edu/schedule/terms/BIOC/190/>)  
Lectures designed to acquaint biochemistry majors with the various specializations available in the field, career exploration procedures, and a wide range of opportunities of special interest to biochemistry students. Prerequisite: Biochemistry Specialized Curriculum majors, transfers and first year freshmen only.

**BIOC 199 Undergraduate Open Seminar** credit: 1 to 5 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/199/>)  
Approved for both letter and S/U grading. May be repeated.

**BIOC 290 Individual Topics** credit: 1 to 5 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/290/>)  
Laboratory work and/or reading in fields selected in consultation with an appropriate faculty member. May be repeated in separate terms to a maximum of 10 hours. Prerequisite: Consent of instructor.

**BIOC 406 Gene Expression & Regulation** credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/406/>)  
Same as MCB 406. See MCB 406.

**BIOC 446 Physical Biochemistry** credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/446/>)  
Physical properties of biological macromolecules, with the emphasis on spectroscopic methods, including UV, visible and FTIR spectroscopies, magnetic resonance techniques as well as X-ray diffraction methods. Same as CHEM 472 and MCB 446. 3 undergraduate hours. 3 graduate hours. Prerequisite: It is strongly recommended to take CHEM 440 (section B) prior to this course. MCB 354 or MCB 450 or equivalent background in biochemistry is also recommended.

**BIOC 455 Technqs Biochem & Biotech** credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/455/>)  
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, peptide sequencing, lipid analysis, carbohydrate analysis, and bioinformatics. 4 undergraduate hours. 4 graduate hours. Prerequisite: CHEM 232 or CHEM 236, or equivalent; credit in MCB 251 or equivalent, and MCB 354 or MCB 450 or equivalent, or consent of instructor.

**BIOC 460 Biochemistry Senior Seminar** credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/460/>)  
Writing intensive course dealing with the technical literature, current issues, and current advances in Biochemistry. 3 undergraduate hours. 3 graduate hours. 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:  
Advanced Composition

**BIOC 492 Senior Thesis** credit: 1 to 6 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/492/>)  
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. 1 to 6 undergraduate hours. No graduate credit. May be repeated; enrollment is limited to three semesters. Prerequisite: MCB 354 and BIOC 455, or consent of instructor.

**BIOC 555 Anlys Biochemical Literature** credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/555/>)  
Same as MCB 555. See MCB 555.

**BIOC 590 Individual Topics** credit: 1 to 16 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/590/>)  
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. Approved for S/U grading only. May be repeated. (Summer Session, 1 to 8 hours). Prerequisite: Consent of head of department.

**BIOC 595 Biochemistry Seminar** credit: 0 to 1 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/595/>)  
Students, faculty, and invited speakers present seminars and discussions on current research topics. Required of all Biochemistry Ph.D. students. Approved for S/U grading only. May be repeated to a maximum of 12 hours. Prerequisite: Graduate standing in Biochemistry.

**BIOC 599 Thesis Research** credit: 0 to 16 Hours. (<https://courses.illinois.edu/schedule/terms/BIOC/599/>)  
Approved for S/U grading only. May be repeated.