

**APPROVED TECHNICAL ELECTIVES FOR THE CWRU BIOCHEMISTRY MAJOR  
(FALL SEMESTER)**

ANAT 312	Basic Histology
BIOC 312	Proteins and Enzymes
BIOL 301	Biotechnology Laboratory
BIOL 306	Mathematical Analysis of Biological Models
BIOL 326	Genetics
BIOL 346	Human Anatomy
BIOL 362	Principles of Developmental Biology
BIOL 373	Introduction to Neurobiology
BIOL 374	Neurobiology of Behavior
CHEM 304	Quantitative Analysis Laboratory (2)
CHEM 311	Inorganic Chemistry I
CHEM 331	Laboratory Methods in Inorganic Chemistry
ECHE 340	Biochemical Engineering
MATH 376	Mathematical Analysis of Biological Models
NTRN 328	Child Nutrition, Development and Health
PHRM 309	Principles of Pharmacology
PHOL 468	Membrane Physiology
PHYS 320	Introduction to Biological Physics

Notes to students:

1. Check the Bulletin for prerequisites and the course schedule for availability.
2. Most graduate courses require the consent of the instructor. Discuss your desire to take a course with your adviser and the course instructor before registration.
3. BIOC 312 and BIOC 334 are both required courses for the **B.S.** Biochemistry major and neither can serve as a technical elective for Biochemistry **B.S.** students.
4. For **B.A.** students who complete both BIOC 312 and BIOC 334, one course will serve as a required course and the other can serve as a technical elective.

**APPROVED TECHNICAL ELECTIVES FOR THE CWRU BIOCHEMISTRY MAJOR  
(SPRING SEMESTER)**

ANAT 312	Basic Histology
ANAT 391	Embryology
ANAT 411	Gross Anatomy (6)
ANAT 610	Oxygen and Physiological Function
BIOC 334	Structural Biology
BIOC 354	Biochemistry and Biology of RNA
BIOL 300	Dynamics of Biological Systems
BIOL 316	Fundamental Immunology (4)
BIOL 319	Applied Probability and Stochastic Processes for Biology
BIOL 325	Cell Biology
BIOL 326	Genetics
BIOL 328	Plant Genomics and Proteomics
BIOL 340	Human Physiology
BIOL 343	Microbiology
BIOL 346	Human Anatomy
BIOL 363	Experimental Developmental Biology
BIOL 378	Computational Neuroscience
BIOL 402	Principles of Neural Science
CHEM 302	Introductory Physical Chemistry II (accepted as elective for <b>B.A. only</b> )
CHEM 305	Introductory Physical Chemistry Lab
CHEM 325	Physical Methods for Determining Organic Structure
CHEM 333	Medicinal Chemistry & Drug Development
CHEM 339	Bioinorganic Chemistry
CHEM 421	Advanced Organic Chemistry I
MBIO 450	Cells and Pathogens
MPHP 464	Obesity and Cancer
NTRN 434	Advanced Human Nutrition II
PATH 444	Neurodegenerative Diseases
PHOL 466	Cell Signaling
PHOL 514	Cardiovascular Physiology

Notes to students:

1. Check the Bulletin for prerequisites and the course schedule for availability.
2. Most graduate courses require the consent of the instructor. Discuss your desire to take a course with your adviser and the course instructor before registration.
3. BIOC 312 and BIOC 334 are both required courses for the **B.S.** Biochemistry major and neither can serve as a technical elective for Biochemistry **B.S.** students.
4. For **B.A.** students who complete both BIOC 312 and BIOC 334, one course will serve as a required course and the other can serve as a technical elective.