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

ANAT 312 Basic Histology
BIOC 312 Proteins and Enzymes
BIOC 501 Biochemical and Cellular Techniques for Biotechnology
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 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.A. only)
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 433  Advanced Human Nutrition I
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.