

ELECTIVE COURSES FOR CHEMISTRY & BIOCHEMISTRY MAJORS

The table below lists approved elective courses for the Chemistry and Biochemistry majors. New courses are offered and old courses deleted with some frequency, so this list will be updated regularly. Some courses on the list may not be offered in a given year. Suitable courses also may be offered in outside departments such as Ecology, Evolution, and Environmental Biology (E³B), Department of Earth and Environmental Sciences (DEES), Biochemistry and Molecular Biophysics (BCHM), and Biomedical Engineering (BMEN).

Adviser approval is required *before* taking any course to satisfy the elective requirement if it is not on this list. Be sure to check that you have completed the necessary prerequisites for any course you are considering. Elective courses must be worth be at least 3 credits. Exceptions have been made for some Columbia graduate-level courses that are 2.5 credits.

C- is the lowest acceptable grade in all required chemistry, biology physics, and mathematics courses. Pass/D /Fail grading is not permitted in any required course.

Course Number	Course Name	Credits
CHEM BC3280	Advanced Organic Chemistry	3.0
CHEM BC3254	Methods and Applications in Physical Chemistry	3.0
CHEM BC3271	Inorganic Chemistry <i>Note: Inorganic Chemistry is a required course for the Chemistry major and thus cannot be counted as an elective for the Chemistry major.</i>	3.0
CHEM BC3282	Biological Chemistry <i>Note: Biological Chemistry is a required course for the Biochemistry major and thus cannot be counted as an elective for the Biochemistry major.</i>	3.0
CHEM BC3283	Biological Chemistry II <i>Note: Biological Chemistry II is a required course for the Biochemistry major and thus cannot be counted as an elective for the Biochemistry major.</i>	3.0
CHEM BC3272	Advanced Inorganic Chemistry	3.0
BIOL BC3310	Cell Biology*	3.0
BIOL BC3320	Microbiology*	3.0
BIOL BC3360	Physiology	
BIOL BC3362	Molecular and Cellular Neuroscience*	3.0
Approved 3000- or 4000-level CU course. ** Adviser approval required.		

*Molecular and Mendelian Genetics (BIOL BC2100) is a prerequisite for all 3000-level Barnard Biology courses.

**Below is a list of CU courses that recent Chemistry and/or Biochemistry majors have completed towards their elective requirement:

CHEM GU4103	Organometallic Chemistry
CHEM GU4111	Applications of NMR Spectroscopy to Inorganic Chemistry (2.5 credits)
CHEM GU4148	Synthetic Methods in Organic Chemistry
CHEM GR6168	Materials Chemistry IIA (2.5 credits)
BIOL UN3006	Physiology
BIOL UN3034	Biotechnology
BIOL UN3073	Cellular and Molecular Immunology
BCHM GU4323	Biophysical Chemistry
EESC GU4924	Intro to Atmospheric Chemistry