

ELECTIVE COURSES for the BIOCHEMISTRY MAJOR

Number	Name	Points
BIOL BC3278x	Evolution	3
BIOL BC3303y	Laboratory in Molecular Biology	3
BIOL BC3305y	Project Laboratory in Molecular Biology	5
BIOL BC3310x	Cell Biology	3
BIOL BC3320x	Microbiology	3
BIOL BC3340y	Plant Physiology	3
BIOL BC3342y	Plant Development	3
BIOL BC3360y	Animal Physiology	3
BIOL BC3362x	Neurobiology	3
BIOL W3034x	Biotechnology	3
BIOL W3073y	Immunology	3
CHEM BC3254y	Methods and Applications in Physical Chemistry	3.5
CHEM BC3271x	Inorganic Chemistry	3.5
CHEM BC3280y	Advanced Organic Chemistry	3.5
CHEM BC3598x or y	Individual Research Problems (external)	4
CHEM BC3599x or y	Individual Research Problems (at Barnard)	4
CHEM C3098x or y	Individual Research Problems (at Columbia)	4 to 6
BIOL BC3591x or y <i>and</i> BIOL BC3595x or y	Guided Laboratory Research (at Barnard) <i>and</i> Seminar	3 or 4 <i>plus</i> 1
BIOC G4170	Biophysical Chemistry	4.5
BIOL-CHEM W4510	Molecular Systems Biology I	4

Courses on this list are chosen because they have considerable chemical or biochemical content. More macroscopic biology courses, like Ecology, are not suitable.

Departments offer new courses and delete previously offered courses with some frequency, so the list of courses suitable for the Biochemistry elective requirement changes, and must be updated regularly. Some courses on the above list may not be offered in a given year, while other suitable courses may have been introduced. Consult with your adviser *before* taking any course to satisfy the elective requirement if it is not on this list. Be sure to check that you have the necessary prerequisites for any course.

Various advanced courses at Columbia University are open to students with the adviser's approval. Barnard biochemistry majors with the appropriate prerequisites can elect first-year graduate courses in organic, and biophysical chemistry, either as options for the major or for additional training.

Pass/D/Fail grading is not permitted in any required course, except for External Research (BC3598) for which the grade is a mandatory P*/F.

C- is the lowest acceptable grade in all required chemistry, biology physics, and mathematics courses.