

BIOCHEMISTRY, MINOR

The Biochemistry Program

Biochemistry is a formalized minor within the Interdisciplinary Studies program. Students must declare this minor before the beginning of preregistration for the final semester of their senior year. Electives are to be selected by each student in consultation with a member of the Advisory Committee. Declaration of the Biochemistry minor involves completing the Biochemistry Minor Application form, submitting the form with an unofficial transcript to any member of the Biochemistry Advisory Committee [Bebout (Director, Chemistry), Hinton (Biology), Landino (Chemistry), Shakes (Biology), Taylor (Chemistry) or Young (Chemistry), Yñiguez-Gutierrez (Chemistry)] for signature approval and submitting the signed form to the Registrar's office.

A Biochemistry minor is especially appropriate for those interested in advanced studies in Biology, Chemistry, or Neuroscience. The Biochemistry minor also complements professional preparation for a career in any field of medicine.

A minor in biochemistry requires successful completion of a minimum of 18 credit hours consisting of a 12 credit core and 6 credits in electives. Only two of the courses applied to the minor may also be applied to major requirements. In addition, at least 9 hours in prerequisites must be completed.

Declaration of a Biochemistry minor must occur after declaring an academic major and should occur before the beginning of preregistration for final semester senior year classes to ensure timely filing with the Office of the Registrar. Declaration of the Biochemistry minor involves completing the Biochemistry Minor Application form, submitting the form with an unofficial transcript to any member of the Biochemistry Advisory Committee [Bebout (Director, Chemistry), Hinton (Biology), Landino (Chemistry), Shakes (Biology), Taylor (Chemistry), Young (Chemistry), Yñiguez-Gutierrez (Chemistry)] for signature approval and submitting the signed form to the Registrar's office.

Course Requirements

Code	Title	Hours
Required Core		
BIOL 203	Introduction to Molecules, Cells, Development	3
CHEM 209	Organic Chemistry II	3
or CHEM 207	Organic Chemistry II for Life Sciences	
CHEM 314	Biochemistry	3
Select one of the following:		3
BIOL 204	Introduction to Organisms, Ecology, Evolution	
CHEM 205	Advanced General Chemistry	
CHEM 208	General Chemistry II and Introduction to Inorganic Chemistry	
Additional Prerequisites		
CHEM 103	General Chemistry I	
CHEM 206	Organic Chemistry I	
Select one of the following:		3
BIOL 204	Introduction to Organisms, Ecology, Evolution	
CHEM 205	Advanced General Chemistry	
CHEM 208	General Chemistry II and Introduction to Inorganic Chemistry	

Possibly additional Mathematics or Biology courses depending on electives chosen

Electives

Students select two additional courses from those listed below; 6
Biology majors must select two courses with a CHEM attribute;
Chemistry majors must select two courses with a BIOL attribute;
students majoring in neither Biology or Chemistry must select one with a BIOL attribute and one with a CHEM attribute.¹

BIOL 306	Microbiology
BIOL 310	Molecular Cell Biology
BIOL 345	Neurobiology
BIOL 415	General Endocrinology
BIOL 420	Genetic Analysis
BIOL 433	Developmental Biology
BIOL 437	Immunology
BIOL 442	Molecular Genetics
BIOL 453	Protein Structure & Function
CHEM 309	Instrumental Analysis
CHEM 341	Physical and Analytical Chemistry for Life Sciences
CHEM 415	Advanced Biochemistry
CHEM 417	Neurochemistry
CHEM 419	Bioinorganic Chemistry

Total Hours 21

¹ Some electives have an optional or required laboratory component.

Additional Guidelines

Non-chemistry majors considering the Biochemistry minor may also wish to consider the Chemistry Minor, which takes only two courses beyond the two-year introductory sequence (with labs) in Chemistry rather than three. Since the Chemistry Minor electives include CHEM 309 Instrumental Analysis, CHEM 341 Physical and Analytical Chemistry for Life Sciences and CHEM 314 Biochemistry, students anticipating scheduling difficulties that may preclude them from completing the Biochemistry Minor may want to fulfill the requirements for a Chemistry Minor first.

Semester course scheduling may vary depending on staff availability, and in some cases there are time conflicts.

Be certain you will have met course prerequisites by the time you plan to enroll in a course.

Declaration of the Biochemistry Minor should be submitted to the Registrar's office before the beginning of preregistration for the final semester of the student's senior year.

A student with two majors may not declare a minor. Only one minor may be declared.

A minimum GPA of 2.0 is required in the courses which are to be counted toward the minor, and none may have been taken pass/fail.

You may count up to two courses toward both a major and a minor.