

Major Elective Requirement:

The Bachelor of Science degrees in Chemistry and Biochemistry require completion of department-approved advanced electives.

Check the online WWU Class Finder for actual days/time and instructors.

For any biology courses, also check their department website for any registration restrictions.

Please note that several of the courses listed below have numerous pre-requisites to take into consideration.

Biology Options (for Biochemistry only)		
Course	Title	Credits
BIOL 322	Genetics Lab	4
BIOL 345	Fundamentals of Microbiology	3
BIOL 424	Applied Molecular Ecology	3
BIOL 432	Evolutionary Biology	4
BIOL 451	Developmental Biology of Plants	3
BIOL 470	Functional Genomics	3
BIOL 476	The Structural Basis of Membrane Transport Proteins	3
BIOL 479	Plant Physiology	5
BIOL 482	Developmental Biology of Animals	3
BIOL 484	Cell Biology Laboratory	5
BIOL 486	Topics in Molecular Mechanisms of Neurodevelopment	3

Chemistry Options (for both Chemistry and Biochemistry)		
Course	Title	Credits
CHEM 401	Independent Research (repeatable up to 3 qtrs.)	1 to 3
CHEM 405	Intensive Writing in Chemistry or Biochemistry (WP1)	1
CHEM 425A	Natural Products Chemistry	3
CHEM 425B	Organic Reactions	3
CHEM 425C	Medicinal Chemistry	3
CHEM 425D	Group Theory and Spectroscopy	3
CHEM 425H	Enzyme Chemistry	3
CHEM 425I	Immunology	3
CHEM 425K	Bioanalytical Instrumentation	3
CHEM 425M	Organometallic Chemistry	3
CHEM 425P	Computers in Chemistry	3
CHEM 425R	Surface Chemistry	3
CHEM 425S	Protein Engineering	3
CHEM 425T	Virology	3
CHEM 425U	Bioinorganic Chemistry	3
CHEM 454	Organic Spectroscopy (WP1)	5
CHEM 494	Industrial Work Experience	3
CHEM 426	Chemistry of Macromolecules	3
CHEM 497	Any listed CHEM 497X course	3
CHEM 498	Honors Research in Chemistry (WP3)	3

Other Department Options (for both Chemistry and Biochemistry)		
Course	Title	Credits
MSCI 497A	Scanning Electron Microscopy	3
CSCI 474	Bioinformatics	4

Degree	Requirement
BS-Chemistry	9 credits advanced approved electives
BS-Biochemistry	1 credits advanced approved electives

Additional Resources

Class Finder

Time Table

Chemistry Advising Site

Biology Registration Site

Pre-Professional Pathways (Pre-Health/Med) Advising

Location

<https://admin.wvu.edu/pls/wwis/wwsktime.SelClass>

<https://admin.wvu.edu/pls/wwis/wwskcfdn.TimeTable>

<https://cse.wvu.edu/chemistry/advising>

<https://cse.wvu.edu/biology/registration>

<http://www.wvu.edu/advising/preprofessionalpathways.shtml>