

## CHEMISTRY MAJOR, STANDARD, B.S.

The chemistry major is designed to equip graduates with the skills, knowledge, and attitudes that are necessary to secure meaningful employment in a private-sector or government laboratory, or teach at the secondary-school level, or gain admission to a graduate or professional program. The standard chemistry major requires:

Course	Title	Credits
<b>General Requirements</b>		
General Education ( <a href="http://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/">http://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/</a> )		26-39
<b>Required Chemistry Courses</b>		
CHEMSTRY 1140	General Chemistry I	4
CHEMSTRY 1240	General Chemistry II	4
CHEMSTRY 2150	Quantitative Analysis	4
CHEMSTRY 2730	Inorganic Chemistry <sup>1</sup>	4
CHEMSTRY 3540	Organic Chemistry I	4
CHEMSTRY 3510	Organic Chemistry I Lab	1
CHEMSTRY 3630	Organic Chemistry II	3
CHEMSTRY 3610	Organic Chemistry II Lab	1
CHEMSTRY 4130	Physical Chemistry	3
CHEMSTRY 4110	Physical Chemistry Lab I	1
CHEMSTRY 4240	Instrumental Analysis	4
CHEMSTRY 4630	General Biochemistry	3
CHEMSTRY 4060	Chemistry Seminar	1
CHEMSTRY 4000 or CHEMSTRY 4660	Undergraduate Research Cooperative Field Experience	1-3
<b>Required Supporting Courses from Math and Physics</b>		
MATH 2640	Calculus and Analytic Geometry I	4
MATH 2740	Calculus and Analytic Geometry II	4
PHYSICS 1350 or PHYSICS 2240	Introductory Physics I General Physics I	5
PHYSICS 1450 or PHYSICS 2340	Introductory Physics II General Physics II	5
<b>Total Credits</b>		<b>82-97</b>

<sup>1</sup> Not required for the criminalistics emphasis-DNA track major.

Students interested in securing secondary-education certification should add GEOGRPHY 3330 to the standard chemistry requirements.

Students who expect to enter a graduate program in chemistry are recommended to choose one of the ACS certified majors.

## CHEMISTRY MAJOR, BIOCHEMISTRY AND BIOTECHNOLOGY EMPHASIS, B.S.

This Biochemistry and Biotechnology Emphasis will allow UW-Platteville students to finish their undergraduate degree from UW-Platteville by inclusion of one semester of transfer credits (15 credits) from completion of the Biotechnology post-baccalaureate intensive certificate program (BPI) at Madison College. Students will successfully complete three and one half years (at least 105 credits) of baccalaureate studies including biotechnology prerequisite courses, general education requirements and major requirements for a baccalaureate degree from UW-Platteville. Successfully completed BPI coursework will transfer 15 credits (as Biology 3000T) to UW-Platteville and count toward the student's undergraduate degree in Chemistry granted by UW-Platteville. The student will also earn a postbaccalaureate certificate in Biotechnology upon successful completion of the requirements.

A minimum of 105 semester credits must be completed at UW-Platteville, including all general education competencies and biotechnology prerequisite courses as well as all chemistry major requirements:

Course	Title	Credits
<b>General Requirements</b>		
Core Curriculum ( <a href="http://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/">http://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/</a> )		26-39

**Required Chemistry Courses**

CHEMSTRY 1140	General Chemistry I	4
CHEMSTRY 1240	General Chemistry II	4
CHEMSTRY 2150	Quantitative Analysis	4
CHEMSTRY 3540	Organic Chemistry I	4
CHEMSTRY 3510	Organic Chemistry I Lab	1
CHEMSTRY 4130	Physical Chemistry	3
CHEMSTRY 4110	Physical Chemistry Lab I	1
CHEMSTRY 4240	Instrumental Analysis	4
CHEMSTRY 4630	General Biochemistry	3
CHEMSTRY 4610	General Biochemistry Lab	1
CHEMSTRY 4830	Biochemistry Topics	3
CHEMSTRY 4060	Chemistry Seminar	1
CHEMSTRY 4000	Undergraduate Research	1-3
or CHEMSTRY 4660	Cooperative Field Experience	
BIOLOGY 1650	The Unity of Life	5
BIOLOGY 3240	Microbiology	5
BIOLOGY 3330	Genetics	3

**Required Supporting Courses from Math and Physics**

MATH 2640	Calculus and Analytic Geometry I	4
MATH 2740	Calculus and Analytic Geometry II	4
PHYSICS 1350	Introductory Physics I	5
or PHYSICS 2240	General Physics I	
PHYSICS 1450	Introductory Physics II	5
or PHYSICS 2340	General Physics II	

**Total Credits****91-106****CHEMISTRY MAJOR, CRIMINALISTICS EMPHASIS, DNA TRACK, B.S.**

The criminalistics emphases DNA track will provide a chemistry major with sufficient background and training to qualify for criminalistic laboratory work. Criminalistics students electing the DNA track complete the standard chemistry major, except CHEMSTRY 2730 and CHEMSTRY 4000, plus:

Course	Title	Credits
<b>Required General Education Courses</b>		
CRIMLJUS 1130	Introduction to Criminal Justice	3
BIOLOGY 1650	The Unity of Life	5
MATH 1830	Elementary Statistics	3
<b>Technical Course Work</b>		
FORENSIC 1320	Introduction to Crime Scene Investigation	3
FORENSIC 2420	Evidence Collection and Preservation	3
FORENSIC 3140	Criminalistics	4
CHEMSTRY 3270	Forensic Chemistry	2
CHEMSTRY 4680	Criminalistics Emphasis Internship	2
<b>Required Chemistry and Biology Courses</b>		
CHEMSTRY 4610	General Biochemistry Lab	1
CHEMSTRY 4830	Biochemistry Topics	3
BIOLOGY 2040	Cell Biology	4
BIOLOGY 3330	Genetics	3
BIOLOGY 4040	Molecular Biology	5
<b>Total Credits</b>		<b>41</b>

The following are to be considered highly recommended electives: CRIMLJUS 3730, CRIMLJUS 4030, and CRIMLJUS 4330.