CHEMISTRY B.S. - FORENSIC CHEMISTRY

General Degree Requirements

To earn a baccalaureate degree, all students must complete successfully, in addition to any other requirements, the University of Montana General Education Requirements. Please refer to the General Education Requirements page (https://catalog.umt.edu/academics/general-education-requirements/) for more information.

Additional requirements for graduation can be found on the Degree/Certificate Requirements for Graduation page (https://catalog.umt.edu/academics/graduation-requirements/).

Unless otherwise noted in individual program requirements, a minimum grade point average of 2.00 in all work attempted at the University of Montana-Missoula is required for graduation. Please see the Academic Policies and Procedures page (https://catalog.umt.edu/academics/policies-procedures/) for information on how your GPA is calculated.

Courses taken to satisfy the requirements of a major, minor, or certificate program must be completed with a grade of C- or better unless a higher grade is noted in the program requirements.

Bachelor of Science - Chemistry; Forensic Chemistry Concentration

Course Requirements

Code	Title	Hours
Lower-Division Core Courses		
Complete all of the following courses:		
BIOB 160	Principles of Living Systems	3
BIOB 161N	Principles of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
CHMY 141N	College Chemistry I	4
CHMY 142N	College Chemistry I Lab	1
CHMY 143N	College Chemistry II	4
CHMY 144N	College Chemistry II Lab	1
CHMY 221	Organic Chemistry I	3
CHMY 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
CJUS 125N	Fundamentals of Forensic Science	3
COMX 111A	Introduction to Public Speaking	3
M 171	Calculus I	4
M 172	Calculus II	4
PHSX 215N	Fundamentals of Physics with Calculus I	4
PHSX 216N	Physics Laboratory I with Calculus	1
PHSX 217N	Fundamentals of Physics with Calculus II	4
PHSX 218N	Physics Laboratory II with Calculus	1
SOCI 211S	Introduction to Criminology	3
SOCI 221	Criminal Justice System	3
Upper-Division Core Courses		
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
CHMY 311	Analytical Chemistry-Quantitative Analysis	4
CHMY 373	Physical Chemistry-Kinetics & Thermodynamics	4
CHMY 401	Advanced Inorganic Chemistry	3
CHMY 421	Advanced Instrument Analysis	4
CHMY 488	Forensic Research	3
or CHMY 498	Internship/Cooperative Education	
CHMY 489	Forensic Research Seminar	1
STAT 451	Statistical Methods I	3
STAT 457	Computer Data Analysis I	1
Advanced Electives		
Complete 7 credits from the following courses:		7
CHMY 411	Advanced Organic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Option for Undergraduate Research	
CHMY 542	Separation Science	
CJUS 488	Forensic Science the Crime Lab and Beyond	
Writing in the Disciplines Requirement		
To complete the Writing in the Disciplines Requirement, Chemistry students take BCH 482 and BCH 486 or any other stand-alone advanced writing course.		
Total Hours		**97**

Four Year Plan

Course	Title	Hours
Freshman		
Autumn		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
BIOB 160 & BIOB 161N	Principles of Living Systems and Principles of Living Systems Lab	4
M 171	Calculus I	4
WRIT 101	College Writing I	4
	Hours	**17**
Spring		
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
M 172	Calculus II	4
COMX 111A	Introduction to Public Speaking	3
CJUS 125N	Fundamentals of Forensic Science	3
	Hours	**15**
Sophomore		
Autumn		
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
SOCI 211S	Introduction to Criminology	3
PHSX 215N & PHSX 216N	Fundamentals of Physics with Calculus I and Physics Laboratory I with Calculus	5
BIOB 260	Cellular and Molecular Biology	4
	Hours	**17**
Spring		
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5

PHSX 217N & PHSX 218N	Fundamentals of Physics with Calculus II and Physics Laboratory II with Calculus	5
SOCI 221	Criminal Justice System	3
General Education Requirement		3
	Hours	**16**
Junior		
Autumn		
BCH 480	Advanced Biochemistry I	3
CHMY 311	Analytical Chemistry-Quantitative Analysis	4
STAT 451	Statistical Methods I	3
General Education Requirement		3
	Hours	**13**
Spring		
CHMY 421	Advanced Instrument Analysis	4
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
STAT 457	Computer Data Analysis I	1
Advanced Elective		3
	Hours	**14**
Senior		
Autumn		
CHMY 401	Advanced Inorganic Chemistry	3
CHMY 373	Physical Chemistry-Kinetics & Thermodynamics	4
CHMY 489	Forensic Research Seminar	1
Advanced Elective		6
General Education Requirement		3
	Hours	**17**
Spring		
CHMY 488	Forensic Research	3
Advanced Elective		6
General Education Requirement		6
	Hours	**15**
	Total Hours	**124**

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