


FORENSIC CHEMISTRY, B.S.


 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.






The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.



















Course Requirements

 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.

Code	Title	Credit Hours
Core Curriculum		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
MTH 229 	Calculus/Analytic Geom I (CT)	5
	Critical Thinking Course	3
<i>Core 2</i>		
ENG 101 	Beginning Composition	3
ENG 201  	Advanced Composition	3
CMM 103 	Fund Speech-Communication	3
MTH 229 	Calculus/Analytic Geom I (CT)	5
BSC 120 	Principles of Biology I	3
BSC 120L 	Principles of Biology I Lab	1
	Core II Humanities	3
CJ 200 	Intro to Criminal Justice (Core II Social Science)	3
	or CJ 211  Intro to Law Enforcement	
	Core II Fine Arts	3
<i>Additional University Requirements</i>		
	Writing Intensive	3
	Writing Intensive	3
	Multicultural or International	3
CHM 491 	Capstone Experience	2
	or CHM 490  Internship	
Major-Specific		
CHM 211 	Principles of Chemistry I	3
		
CHM 217 	Principles of Chem Lab I	2
		

CHM 212 	Principles Chemistry II	3
		
CHM 218 	Principles of Chem Lab II	2
		
CHM 355 	Organic Chemistry I	3
CHM 356	Organic Chemistry II	3
CHM 361	Intro Organic Chm Lab	3
CHM 305	Research Methods Chem	1
CHM 345	Intro to Analytical Chem	4
CHM 365 	Introductory Biochemistry	3
Select one of the following:		4
CHM 357	Physical Chemistry: Quantum (WI)	
CHM 358	Physical Chemistry: Thermo. (WI)	
CHM 411	Modern Instrument Methods	4
CHM 491 	Capstone Experience (C)	2
	or CHM 490  Internship	
CHM 432	Chemistry Seminar	0
300/400 CHM Elective		3
PHY 201 	College Physics I	3
PHY 202  	General Physics I Laboratory	1
PHY 203  	College Physics II	3
PHY 204  	General Physics 2 Laboratory	1
STA 225 	Introductory Statistics (CT)	3
	or STA 345 Applied Prob and Stat	
BSC 121 	Principles of Biology	3
BSC 121L 	Prin of Biology II Lab	1
BSC 322	Principles Cell Biology	4
BSC 324	Principles of Genetics	4
CIT 163	Intro to Programming: C++	3
<i>Restricted Electives</i> ¹		
Chemistry courses may not be counted both as a chemistry elective and in this category.		
Select two of the following:		6
BSC 332	Principles of Human Anatomy (and BSC 332L)	
BSC 334	Principles of Human Physiology (and BSC 334L)	
BSC 450	Molecular Biology	
CHM 428	Intro Forensic Methods	
CHM 467	Intermediate Biochemistry	
CJ 314	Crime Scene Investigation	3
CJ 323	Criminal Procedure	3
	or CJ 422 Law of Evidence	

¹ Restricted Elective: Selection of one of the BSC courses provides a Biological Sciences minor.


Major Information

- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- In addition to the Core General Education requirements, the College of Science requires 3 hours of Calculus, and 40 hours of upper level credit.

- Coursework listed as “elective” may vary for each student. Students are encouraged to use elective hours toward a minor or toward prerequisites.
- Students are strongly encouraged to select courses that meet two or more Core or College requirements. For example, a writing intensive literature course could satisfy the Core II Humanities as well as the University writing intensive requirement.
- Course offerings and course attributes are subject to change semesters. Please consult each semesters schedule of courses for availability and attributes.
- Math is based on an ACT Mathematics score of 27 or higher. Students with an ACT Mathematics score less than 27 will be placed in the appropriate mathematics and science courses.
- Students are strongly encouraged to engage in a Forensic Chemistry related Capstone Experience (CHM 491 Capstone Experience).
- A Grade Point Average of 2.0 is required
 - a. overall,
 - b. at MU,
 - c. in all required Chemistry courses,
 - d. in all Chemistry courses, and
 - e. in all required Chemistry courses taken at MU.

Semester Plan








 - General Education Course

 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

This major is intended for students who wish to pursue a career in fields involving forensics. Degrees offered by the Department of Chemistry provide a program of studies that allows the individual to: obtain high quality instruction in chemistry as a scientific discipline, obtain a sound background in preparation for advanced studies, meet the qualifications of professional chemists and accrediting agencies, or prepare for a professional career in medicine, dentistry, pharmacy, medical technology, engineering, nursing and other fields.






First Year



First Semester

CHM 211 	Principles of Chemistry I	3
		
CHM 217 	Principles of Chem Lab I	2
		
BSC 120 	Principles of Biology I	3
BSC 120L 	Principles of Biology I Lab	1
ENG 101 	Beginning Composition	3
FYS 100	First Yr Sem Critical Thinking	3
UNI 100	Freshman First Class	1

Credit Hours 16






Second Semester

MTH 229 	Calculus/Analytic Geom I (CT)	5
CHM 212 	Principles Chemistry II	3
		
CHM 218 	Principles of Chem Lab II	2
		





BSC 121 	Principles of Biology	3
BSC 121L 	Prin of Biology II Lab	1
Credit Hours		14

Second Year

First Semester

CHM 355 	Organic Chemistry I	3
PHY 201 	College Physics I	3
PHY 202 	General Physics I Laboratory	1
CJ 200 	Intro to Criminal Justice (Core II Social Science)	3
STA 225 	Introductory Statistics (CT)	3
or STA 345	or Applied Prob and Stat	
Free Elective		1
Credit Hours		14

Second Semester

CHM 356	Organic Chemistry II	3
CHM 361	Intro Organic Chm Lab	3
PHY 203 	College Physics II	3
PHY 204 	General Physics 2 Laboratory	1
CMM 103 	Fund Speech-Communication	3
ENG 201 	Advanced Composition	3
Credit Hours		16

Third Year

First Semester



CHM 365	Introductory Biochemistry	3
CHM 305	Research Methods Chem	1
Core II Fine Arts (Milestone course)		3
CIT 163	Intro to Programming: C++	3
CJ 314	Crime Scene Investigation	3
Free Elective		3
Credit Hours		16

Second Semester

Select one of the following:		4
CHM 358	Physical Chemistry: Thermo. (WI)	4
Core II Humanities (CT)		3
BSC 322	Principles Cell Biology	4
CJ 323	Criminal Procedure	3
or CJ 422	or Law of Evidence	
Credit Hours		18

Fourth Year

First Semester

CHM 345	Intro to Analytical Chem	4
CHM 491 	Capstone Experience	2
or CHM 490	or Internship	
		
BSC 324	Principles of Genetics	4
Writing Intensive		3
Restricted Elective		3
Credit Hours		16

Second Semester

CHM 432	Chemistry Seminar	0
300/400 CHM Elective		3

Restricted Elective	4
CHM 411 Modern Instrument Methods	4
Multicultural or International	3
Credit Hours	14
Total Credit Hours	124