

# FORENSIC CHEMISTRY

## REQUIREMENTS

**CORE CURRICULUM** 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 [marshall.edu/gened](http://marshall.edu/gened).

### CORE 1: CRITICAL THINKING

CODE	COURSE NAME	HRS	GRADE
FYS 100	First Year Seminar	3	_____
MTH 229	Critical Thinking Course	5	_____
_____	Critical Thinking Course	3	_____

#### Additional University Requirements

_____	Writing Intensive (CHM 357 or CHM 358)	3	_____
_____	Writing Intensive	3	_____
_____	Multicultural or International	3	_____
CHM 491	Capstone	2	_____

### CORE 2:

CODE	COURSE NAME	HRS	GRADE
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/L	Principles of Biology I / Lab	3/1	_____
_____	Core II Humanities	3	_____
CJ 200 or CJ 211	Intro to Criminal Justice	3	_____
_____	Core II Fine Arts	3	_____

## MAJOR-SPECIFIC

All Forensic Chemistry majors are required to take the following courses:

CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
CHM 211	Principles of Chemistry I	3	_____	PHY 201	College Physics I	3	_____
CHM 217	Principles of Chemistry I Lab	2	_____	PHY 202	College Physics I Lab	1	_____
CHM 212	Principles of Chemistry II	3	_____	PHY 203	College Physics II	3	_____
CHM 218	Principles of Chemistry II Lab	2	_____	PHY 204	College Physics II Lab	1	_____
CHM 355	Organic Chemistry I	3	_____	_____	Statistics Elective (STA 225 or 345)	3	_____
CHM 356	Organic Chemistry II	3	_____	BSC 121/L	Principles of Biology II / Lab	3/1	_____
CHM 361	Organic Chemistry II Lab	3	_____	BSC 322	Cell Biology	4	_____
CHM 305	Research Methods Chemistry	1	_____	BSC 324	Genetics	4	_____
CHM 345	Intro Analytical Chemistry	4	_____	CIT 163	Intro to Programming C++	3	_____
CHM 357	Physical Chemistry: Quantum or 358	4	_____	_____	Restricted Elective	3	_____
CHM 365	Biochemistry	3	_____	_____	Restricted Elective	3	_____
CHM 411	Instrumental Methods	4	_____	CJ 314	Crime Scene Investigation	3	_____
CHM 491	Capstone or CHM 490	2	_____	CJ 323 or 422	Criminal Law or Law of Evidence	3	_____
CHM 432	Seminar	0	_____				
_____	300/400 CHM Elective	3	_____				

## 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 semester's 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.
- Statistics Elective: Choose from STA 225 or STA 345.
- Restricted Elective: Choose two courses from BSC 450, CHM 428 or 467. Students are strongly encouraged to engage in a Forensic Chemistry related Capstone Experience (CHM 491).
- A Grade Point Average of 2.0 is required 1) overall, 2) at MU, 3) in all required Chemistry courses, 4) in all Chemistry courses, and 5) in all required Chemistry courses taken at MU.
- Double majors within the Department of Chemistry may include any majors other than the B.S., Major in Chemical Sciences. A double major of Forensic Chemistry with Biochemistry is also currently not permitted.

Area of Emphasis


Major Requirement

College Requirement


General Education Requirement

# FORENSIC CHEMISTRY

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.

		FALL SEMESTER				SPRING SEMESTER				
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE	
YEAR ONE		CHM 211	Principles of Chemistry I	3	_____	MTH 229	Calculus/Analytic Geom I (CT)	5	_____	
		CHM 217	Principles of Chemistry I Lab	2	_____		CHM 212	Principles of Chemistry II	3	_____
		BSC 120/L	Principles of Biology I / Lab	3/1	_____		CHM 218	Principles of Chemistry II Lab	2	_____
		ENG 101	Beginning Composition	3	_____	BSC 121/L	Principles of Biology II / Lab	3/1	_____	
		FYS 100	First Year Sem Crit Thinking	3	_____					
		UNI 100	Freshman First Class	1	_____					
		<b>TOTAL HOURS</b>		<b>16</b>		<b>TOTAL HOURS</b>		<b>14</b>		
Summer Term (optional):										
		FALL SEMESTER				SPRING SEMESTER				
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE	
YEAR TWO		CHM 355	Organic Chemistry I	3	_____	CHM 356	Organic Chemistry II	3	_____	
		_____	Statistics Elective (STA 225 or 345)	3	_____	CHM 361	Organic Chemistry Lab	3	_____	
		PHY 201	College Physics I	3	_____		PHY 203	College Physics II	3	_____
		PHY 202	College Physics I Lab	1	_____		PHY 204	College Physics II Lab	1	_____
		CJ 200	Intro to Criminal Justice	3	_____	CMM 103	Fund Speech-Communication	3	_____	
		BSC 121	Principles of Biology II	4	_____		ENG 201	Advanced Composition	3	_____
		<b>TOTAL HOURS</b>		<b>17</b>		<b>TOTAL HOURS</b>		<b>16</b>		
Summer Term (optional):										
		FALL SEMESTER				SPRING SEMESTER				
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE	
YEAR THREE		CHM 365	Biochemistry	3	_____	CHM 358	Physical Chemistry I or (CHM 357 in Fall) (WI)	4	_____	
		CHM 305	Research Methods Chemistry	1	_____	_____	Core II Humanities (CT)	3	_____	
		_____	Core II Fine Arts	3	_____	BSC 322	Cell Biology	4	_____	
		CIT 163	Intro to Programming C++	3	_____	CJ 323 or	Criminal Law or Law of Evidence	3	_____	
		CJ 314	Crime Scene Investigation	3	_____	422				
			<b>TOTAL HOURS</b>		<b>13</b>		<b>TOTAL HOURS</b>		<b>14</b>	
Summer Term (optional):										
		FALL SEMESTER				SPRING SEMESTER				
		CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE	
YEAR FOUR		CHM 345	Intro Analytical Chemistry	4	_____	CHM 432	Chemistry Seminar	0	_____	
		CHM 491	Capstone Experience (or CHM 490)	2	_____	_____	300/400 CHM Elective	3	_____	
		BSC 324	Genetics	4	_____	_____	Restricted Elective	4	_____	
		_____	Writing Intensive	3	_____	CHM 411	Instrumental Methods	4	_____	
		_____	Restricted Elective	3	_____	_____	Multicultural or International	3	_____	
			<b>TOTAL HOURS</b>		<b>16</b>		<b>TOTAL HOURS</b>		<b>14</b>	
Summer Term (optional):										

 Area of Emphasis

 Major Requirement

 College Requirement

 General Education Requirement

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