MY ADVISOR'S NAME IS:

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FOUR YEAR PLAN COLLEGE OF SCIENCE 2022-2023

ENVIRONMENTAL CHEMISTRY

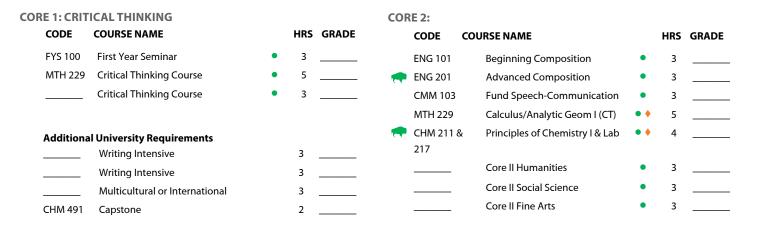
Students completing the environmental chemistry major will be prepared for career opportunities in environmental chemistry, toxicology, environmental policy, and consulting. Additionally, Environmental Chemistry is an excellent choice for students desiring to pursue professional training in Law, or Safety, or Industrial Hygiene.

		CODE	FALL SEMESTER		HPS	GRADE		CODE	SPRING SEMESTER		HRS	GRAD
		CHM 211	Principles of Chemistry I	• •	3	GRADE	-	ENG 201	Advanced Composition	•	3	GNAD
			• • •	• •					·	•		
	रार	CHM 217	Principles of Chemistry I Lab		2			CHM 212	Principles of Chemistry II		3	
ONE		BSC 120/L		• •	3/1			CHM 218	Principles of Chemistry II Lab	•	2	
0		ENG 101	Beginning Composition	•	3			MTH 229	Calculus/Analytic Geom I (CT)	• •	5	
AR		FYS 100	First Year Sem Crit Thinking	•	3			BSC 121/L	Principles of Biology II / Lab	•	3/1	
YEAR		UNI 100	Freshman First Class		1							
		TOTAL HC			16			TOTAL HO	URS		17	
	Sum	mer Term (op	otional):									
			FALL SEMESTER			_			SPRING SEMESTER	-		-
		CODE	COURSE NAME	_	HRS	GRADE		CODE		_	HRS	GRAI
		CHM 355	Organic Chemistry I	•	3	GRADE		CHM 356	Organic Chemistry II	•		GNAI
		PHY 201	College Physics I	•	3			CHM 350	Organic Chemistry Lab	•	-	
\sim		PHY 201			5 1			PHY 203	5 ,	•	-	
TWO	·	PHT 202	College Physics I Lab	•	•				College Physics II		-	
			Core I Critical Thinking		3		- T	PHY 204	College Physics II Lab	•	-	
YEAR			Core II Social Science	•	3			CMM 103	Fund Speech-Communication		3	
ΥE							ेर्टर		Core II Fine Arts	•	3	
		TOTAL HO			13			TOTAL HO	URS		16	
	Sum	mer Term (op	otional):									
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
		CHM 357	Physical Chemistry: Quantum (or	٠	4				Enviro Science Requirement	٠	4	
			358 in Spring)						Core II Humanities (WI)	•	3	
臣		CHM 305	Research Methods Chemistry	٠	1				Statistics Elective	٠	3	
THREE	-	CHM 365	Intro to Biochemistry	•	3			CHM 411	Modern Instrumental Methods	•	4	
E		BSC 320	Ecology	٠	4			GLY 200	The Dynamic Earth	٠	3	
AR			Free Elective		1				,			
YE/												
×		TOTAL HO	NURS		13			TOTAL HO	URS		17	
	Sum	mer Term (op									.,	
		· ·	,									
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRA
			Environmental Analytical Chemistry	•	3			CHM 432	Chemistry Seminar	٠	0	
		CHM 491	Capstone Experience (or CHM 490)	•	2			GEO 422	Environmental Geography	٠	3	
			Enviro Science Requirement	•	4			BSC 445	Micro Ecology	٠	3	
JR			Writing Intensive	•	3			NRE 323	Assessment II: Aquatic Ecology	٠	4	
OUR			Assess I: Terrestrial Systems	٠	4				Multicultural or International	•	3	
R FOUR		NRE 322	,									
FAR FOUR		NRE 322	,									
YEAR FOUR		NRE 322	,									
YEAR FOUR		NRE 322			16			TOTAL HO	URS		13	

ENVIRONMENTAL 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.



MAJOR-SPECIFIC

All Environmental 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 202	College Physics I Lab	٠	1	
•	CHM 217	Principles of Chemistry I Lab	• •	2		-	PHY 203	College Physics II	٠	3	
•	CHM 212	Principles of Chemistry II	٠	3		.	PHY 204	College Physics II Lab	٠	1	
•	CHM 218	Principles of Chemistry II Lab	٠	2			BSC 120/L	Principles of Biology I / Lab	• •	3/1	
T	CHM 355	Organic Chemistry I	٠	3			BSC 121/L	Principles of Biology II / Lab	٠	3/1	
	CHM 356	Organic Chemistry II	٠	3		-	BSC 320	Ecology	٠	4	
	CHM 361	Organic Chemistry II Lab	٠	3			BSC 445	Micro Ecology	٠	4	
	CHM 305	Research Methods Chemistry	٠	1			GLY 200	The Dynamic Earth	٠	3	
	CHM 357	Physical Chemistry: Quantum or	٠	4			GEO 416	Envir Plan or Enviro Geo	•	3	
	or 358	Physical Chemistry: Thermo					or 422				
•	CHM 365	Biochemistry	٠	3			NRE 322	Assesment I	•	4	
	CHM 411	Modern Instrumental Methods	•	3			NRE 323	Assesment II	•	3	
	CHM 491	Capstone	• •	2				Statistics Elective	٠	3	
	CHM 432	Seminar	•	0				Environ Science Requirement	٠	4	
•	CHM 423	Environ Analytical Chemistry	•	3				Environ Science Requirement	٠	4	
	PHY 201	College Physics I	٠	3				Free Elective		1	

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 or toward prerequisities.
- 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 requirement 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.

- Environ Science Requirement: Students should choose at least 8 credit hours from the following courses: BSC 431, 446 CHM 467 GLY 320L, 420, 455, 455L, 456, 456L NRE 320, 321 PHY 412; courses from a maximum of two departments may be selected. Students wishing a physical science emphasis may take all of the Geology electives and not take either BSC 445 or NRE 323.
- 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.

INVOLVEMENT OPPORTUNITIES

- Student Government Association
- Campus Activity Board
- JMELI
- Commuter Student Advisory Board
- Club Sports
- Religious Organizations
- Political Organizations
- Residence Hall Association
- Cultural Organizations
- National Society of Leadership and Success
- Greek Life
- **RELATED MAJORS**
- Biomechanics Athletic Training
- Education
- Geology
- Geography
- Environmental Science

GRADUATION REQUIREMENTS

- Have a minimum of 120 credit hours (some colleges or majors require more);
- Have an overall and Marshall Grade Point Average of 2.00 or higher;
- Have an overall Grade Point Average of 2.00 or higher in the major area of study;
- Have earned a grade of C or better in English 201 or 201 H;
- Have met all major(s) and college requirements;
- Have met the requirements of the Core Curriculum;
- Have met the residence requirements of Marshall University, including 12 hours of 300/400 level coursework in the student's college (see section entitled "Residence Requirements" in the undergraduate catalogue);
- Be enrolled at Marshall at least one semester of the senior year;
- Have transferred no more than 72 credit hours from an accredited West Virginia twoyear institution of higher education.

Colleges and specific programs may have unique requirements that are more stringent than those noted above. Students are responsible for staying informed about and ensuring that they meet the requirements for graduation.

This academic map is to be used as a guide in planning your coursework toward a degree. Due to the complexities of degree programs, it is unfortunate but inevitable that an error may occur in the creation of this document. The official source of degree requirements at Marshall University is DegreeWorks available in your myMU portal. Always consult regularly with your advisor.

ENVIRONMENTAL CHEMISTRY – 2022-2023

YEAR ONE



Stay on the Herd Path and come to class! Class attendance is more Develop relationships with professors important to your success than who can serve as future references by your high school GPA, your class attending their office hours. standing, or your ACT/SAT scores.





Join the Alpha Chi Sigma chemistry professional fraternity.

(D)

Develop relationships with professors

who can serve as future references by

attending their office hours.

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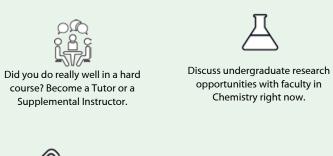
Apply in the spring semester for

Chemistry Department scholarships

and summer fellowships.

Apply for a nationally competitive scholarship like Goldwater, Fullbright, Rhodes, or Gates Cambridge. Contact the Office of National Scholarships at Marshall.

YEAR TWO



Chemistry right now.



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Discuss undergraduate research

opportunities with faculty in

Chemistry right now.

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Take a pulse check. Know what

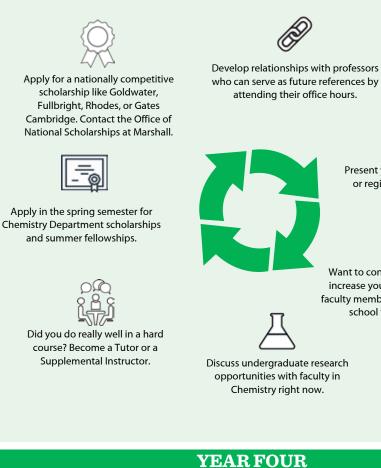
you need to do every year to keep

your grants, scholarships, or federal

financial aid.

Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.

Apply for a nationally competitive scholarship like Goldwater, Fullbright, Rhodes, or Gates Cambridge. Contact the Office of National Scholarships at Marshall.



YEAR THREE



This is it! Are you on track to graduate? Meet with your advisor for your Senior Eval to see what requirements you have left.

Present your research at a national or regional American Chemical Society meeting.



Did you do really well in a hard course? Become a Tutor or a Supplemental Instructor.



Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.



ШÇ Present your research at the College of Science Research Day.





TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

- Scientific Ability
- Oral and Written Communication Skills
- Ability to Work as Part of a Team
- Technological Literacy
- Adaptability

ASSOCIATED CAREERS

- Product Development
- Process Development
- Analysis
- Quality Assurance/Control
- Environmental Analysis
- Chemical Engineer
- Pharmacist
- Pharmaceutical Sales
- Marketing



Present your research at a national or regional American Chemical Society meeting.



Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.



Complete admissions exams (GRE, MCAT, PCAT) the summer before your senior year.



Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.



Marshall University **College of Science** 1 John Marshall Drive Huntington, WV 25755 1-304-696-3170 cos@marshall.edu marshall.edu/cos