# CURRICULUM PLAN COLLEGE OF SCIENCE 2024-2025 **ENVIRONMENTAL SCIENCE** APPLIED ENVIRONMENTAL REQUIREMENTS

MY ADVISOR'S NAME IS:

## 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.

CORE 1: CRITICAL THINKING				CORE 2:						
CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	•	3			🜪 ENG 101	Beginning Composition	•	3	
NRE 220	Critical Thinking Course	٠	3			ENG 201	Advanced Composition	•	3	
NRE 120	Critical Thinking Course	٠	3			🜪 СММ 103	Fund Speech-Communication	•	3	
						<b>MTH140</b>	Applied Calculus	• •	3	
Addition	al University Requirements						Core II Humanities	•	3	
	Writing Intensive		3				Core II Social Science	•	3	
	Writing Intensive		3				Core II Fine Arts	•	3	
	Multicultural or International		3			🜪 BSC 120 o	or Principles of Biology or Living	•	4	
NRE 491	Capstone		3			NRE 111	Systems			

#### MAJOR-SPECIFIC

All Environmental Sciences majors are required to take the following courses:

	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE	×
	CIT 150	Spreadsheets & Database Prin	•	3		-	CHM 218	Principles of Chemistry II Lab	٠	2		stud
-	MTH 140	Applied Calculus	• •	3			NRRM 200	Analytical Methods: Statistics	٠	4		n of
	NRE 120	Discussion in Environ Science (CT)	• •	3			NRE 323	Assessment II: Aquatic Ecology	•	4		r pla
	NRE 220	Human Dimensions of Nat Res (CT)	• •	3		-	NRE 423	GIS and Data Systems	٠	3		i you
<b>•</b>	CHM 211	Principles of Chemistry I	٠	3		<b>.</b>	NRE 470	Internship or Senior Project	• •	3		se in
<b>•</b>	CHM 217	Principles of Chemistry I Lab	•	2			or 491					cour
-	CHM 212	Principles of Chemistry II	•	3			NRE 490	ES/NRRM Capstone Prep	•	3		this
							NRE 425	Water Policy and Regulations	•	3		e of
ARE	A OF EM	PHASIS-SPECIFIC										rtanc

### AREA OF EMPHASIS-SPECIFIC

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
BSC 120/L or	Principles of Biology I / Lab or	• •	4		NRE 322	Assess I: Terrestrial Systems	٠	4	
NRE 111	Living Systems					Major Elective	۵	3	
NRE 212 or	Energy or College Physics	٠	3-4			Major Elective	٠	3	
PHY 201/202						Major Elective	٠	3	
GLY 200	The Dynamic Earth	٠	3			Major Elective	۵	3	
GLY 210L	Earth Materials Lab	٠	1			Major Elective	•	3	
CIT 260	Intrumentation	٠	3			Major Elective	•	3	
CIT 264	Technology Foundations	٠	3			Free Elective		3	
NRE 320	Nature Enviro Problems	۲	3			Free Elective		1	
NRE 321	<b>Resol Environ Problems</b>	٠	3					-	
NRE 435	Biomonitoring		4						

#### MAJOR INFORMATION

- In addition to the Core General Education requirements, the College of Science requires 3 hours of Calculus, 8 additional hours of Natural or Physical Science, 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 2nd 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 requirement as well as the university writing intensive requirement.
- Course offerings and course attributes are subject to change each semester. Please consult each semester's schedule of courses for availability and attributes.
- Math is based on an ACT Mathematics score of 24 or higher. Students with an ACT Mathematics score less than 24 will be placed in the appropriate prerequisite mathematics and science courses.
- Electives: In consultation with the COS advisors, students will select electives from the College of Science offerings best suited to prepare students to apply for professional credentials as a certified ecologist, certified wildlife biologist, or certified fisheries professional. Once a student has satisfied all of the requirements for one of these certifications, he or she should select additional electives in consultation with NRE/COS advisers to reach the 120 credit hours required for graduation. Additional electives may be used to satisfy general education requirements (e.g., writing intensive) and/or to fulfill the requirements of a second major, minor, or certificate.

# FOUR YEAR PLAN COLLEGE OF SCIENCE 2024-2025 **ENVIRONMENTAL SCIENCE APPLIED ENVIRONMENTAL**

The Bachelor of Science in Environmental Science degree is an integrated program requiring math, communication, and environmental studies courses and basic science courses from Geology, Biology, Chemistry, and Physics departments. The integrated coverage of broad topics prepares students for the complex problems facing a modern world. Areas of Emphasis help focus student efforts toward individual goals and interests with consideration to obtaining rewarding careers in the fields of environmental science or conservation or pursuing advanced studies.

			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME			GRADE		CODE	COURSE NAME			GRAI
		CIT 150	Spreadsheets & Database Prin	•	3			CMM 103	Fund Speech-Communications	•	3	
		NRE 120	Discussions in Environ Science (CT)	• •	3		-	BSC 120/L	Principles of Biology I / Lab or	• •	4	
ЧE Н		MTH 140	Applied Calculus	• •	3			or NRE 111	Living Systems		-	
ONE		ENG 101	Beginning Composition	•	3			GLY 200	The Dynamic Earth	•	3	
AR		FYS 100	First Year Seminar	•	3			GLY 210L	Earth Materials Lab	•	1	
YEAR		UNI 100	Freshman First Class		1			NRE 220	Human Dimensions of Nat Res (CT)	• •	3	
		TOTAL HO	DURS		16			TOTAL HOU	JRS		14	
	Sumi	mer Term (op	otional):									
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRA
		CHM 211	Principles of Chemistry I	•	3			NRE 212 or	Energy or College Physics	٠	3-4	
		CHM 217	Principles of Chemistry I Lab	•	2			PHY 201/20				
NO		ENG 201	Advanced Composition	•	3		-	CHM 212	Principles of Chemistry II	•	3	
TWO			Core II Fine Arts	•	3		-	CHM 218	Principles of Chemistry II Lab	•	2	
Ч			Core II Social Science (M/I)	٠	3			NRRM 200	Analytical Methods: Statistics	•	4	
YEAR			Free Elective		1			CIT 264	Technology Foundations	•	3	
		TOTAL HO	DURS		15			TOTAL HOU	JRS	ł	15-16	
	Sum	mer Term (op	otional):									
	_	_	FALL SEMESTER					_	SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE			COURSE NAME		HRS	GRA
		NRE 323	Assessment II: Aquatic Ecology	•	4 .				Assess I: Terrestrial Systems	٠	4	
田		NRE 423	GIS and Data Systems	•	3.			NRE 321	Resol Environ Problems	•	3	
THREE		CIT 260	Intrumentation	•	3			NRE 490	ES/NRRM Capstone Prep	•	3	
E.		NRE 320	Nature Enviro Problems	•	3.				Major Elective	٠	3	
			Humanities (WI)	•	3				Major Elective	٠	3	
EAR												
K		TOTAL HO	DURS		16			TOTAL HOU	JRS		16	
	Sumi	mer Term (op	otional):									
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME			GRADE			COURSE NAME			GRA
		NRE 425	Water Policy and Regulations	•	3				Internship or Senior Project	• •	3	
			Major Elective	•	3			or 491				
~			Major Elective	٠	3			NRE 435	Biomonitoring	٠	3	
UR					3				Major Elective	٠	3	
FOUR			Major Elective	•	5							
Εų.				•	3				Free Elective		3	
YEAR FOUR			Major Elective	•					Free Elective		3	
Εų.		TOTAL HO	Major Elective Writing Intensive	•				TOTAL HOU			3 12	

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### 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

- Mechanical Engineering
- Civil Engineering
- Safety Technology
- Computer Science
- Chemistry
- Biology

## **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 twovear 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.

#### MART Stay on the Herd Path and come Have questions? Need to talk? You to class! Class attendance is more already have a Friend-At-Marshall important to your success than ready to help you succeed. Find your your high school GPA, your class FAM Peer Mentor here: standing, or your ACT/SAT scores. www.marshall.edu/fam Have you considered adding a minor or certification? Think about personal areas of interest that might give you a more marketable skill set.



Join the Marshall Environmental Science Association, SCUBA Club, or other organization.





**YEAR ONE** 

Are you completing enough credits to graduate on time? Dropping or failing a class can put you behind. Use summer terms to quickly get back on track.

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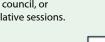
Have you considered adding a minor or certification? Think about personal areas of interest that might give you a more marketable skill set.



Run for Student Government and represent your fellow students while making a long-term difference on Marshall's Campus.



#### the school board, neighborhood associations, city council, or important state legislative sessions.





Strengthen your resume and enhance your presentation skills. Present what you've learned at an academic conference off campus.



Don't enter your field with zero experience! Secure an internship related to your field of study.

other organization.



In order to graduate on time, you need to take an average of 15 credits per semester. Are you on track? Take 15 to Finish!

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Take a career self-assessment to help determine what jobs fit your talents and interests. We can get you there.

Take a pulse check. Know what you need to do every year to keep your grants, scholarships, or federal financial aid.

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requirements you have left.

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

Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.) and



Run for Student Government and represent your fellow students while making a long-term difference on Marshall's Campus.



#### Join professional associations in your field, like: American Fisheries Society, Ecological Society of America, Association of Southeastern Biologists.

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

# **YEAR THREE**



Join professional associations in your field, like: American Fisheries Society, Ecological Society of America, Association of Southeastern Biologists.



Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.)and ask at least one to be your mentor.



Strengthen your resume and enhance your presentation skills. Present what you've learned at an academic conference off campus.

while making a long-term



Take a Community Based Learning (CBL) class that connects course content to the community. Stav engaged and make a difference.

# **YEAR FOUR**

ask at least one to be your mentor.



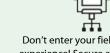












Join the Marshall Environmental Science Association, SCUBA Club, or

# **APPLIED ENVIRONMENTAL SCIENCE – 2024-2025**





Are you on track to graduate? Meet with your advisor for your Junior Eval to make sure you know what requirements you have left.



Don't enter your field with zero experience! Meet with your advisor to discuss your internship options.

### TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

- Scientific Knowledge
- Organizational Skills
- Technological Literacy
- Adaptability
- Ability to Work as Part of a Team
- Attention to Detail

#### ASSOCIATED CAREERS

- Land Use Manager
- Water/Wetlands Manager
- Fishery Manager
- Forestry and Wildlife Manager
- Conservationist



Attend civic meetings, such as the school board, neighborhood associations, city council, or important state legislative sessions.



Volunteer on a research project for valuable experience.



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