### CURRICULUM PLAN COLLEGE OF SCIENCE 2024-2025

MY ADVISOR'S NAME IS:

# **ENVIRONMENTAL SCIENCE ENVIRONMENTAL SCIENCE EMPHASIS** 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.

CORE 1: CRIT	TICAL THINKING				CO	RE 2:				
CODE	COURSE NAME		HRS	GRADE		CODE CO	OURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	٠	3			ENG 101	Beginning Composition	•	3	
NRE 120	Critical Thinking Course	•	3			ENG 201	Advanced Composition	٠	3	
NRE 220	Critical Thinking Course	٠	3			CMM 103	Fund Speech-Communication	٠	3	
						MTH140	Applied Calculus	• •	3	
Addition	al University Requirements						Core II Humanities	٠	3	
	Writing Intensive		3				Core II Social Science	٠	3	
	Writing Intensive		3				Core II Fine Arts	٠	3	
	Multicultural or International		3			BSC 120/L	Core II Physical/Nat Science	٠	4	
NRE 491	Capstone		3							

#### 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	٠	3			NRE 425	Water Policy and Regulations	٠	3	
1	MTH 140	Applied Calculus	• •	3			NRRM 200	Analytical Methods: Statistics	٠	4	
	NRE 120	Discussion in Environ Science (CT)	• •	3		-	NRE 323	Assessment II: Aquatic Ecology	٠	4	
	NRE 220	Human Dimensions of Nat Res (CT)	• •	3		-	NRE 423	GIS and Data Systems	٠	3	
1	CHM 211	Principles of Chemistry 1	٠	3			NRE 470	Internship or Senior Project	• •	3	
1	CHM 217	Principles of Chemistry 1 Lab	•	2			or 491				
-	CHM 212	Principles of Chemistry II	•	3			NRE 490	ES/NRRM Capstone Prep	٠	3	
	CHM 218	Principles of Chemistry II Lab	٠	2							

#### AREA OF EMPAHSIS-SPECIFIC

Students who wish to add an area of empahsis in Environmental Science must take the following courses:

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
BSC 120/L	Principles of Biology I / Lab	٠	4		GLY 200	The Dynamic Earth	•	3	
BSC 121/L	Principles of Biology II / Lab	۲	4		GLY 210L	Earth Materials Lab	•	1	
PHY 201	College Physics I	۲	3			Major Elective	•	4	
PHY 202	College Physics I Lab	٠	1			Major Elective	•	3	
PHY 203	College Physics II	۲	3			Major Elective	•	3	
PHY 204	College Physics II Lab	٠	1			Major Elective	•	3	
BSC 320	Principles of Ecology	۲	4			Major Elective	•	3	
NRE 212	Energy	٠	3			Free Elective		3	
NRE 322	Assess I: Terrestrial Systems	٠	4			Free Elective		3	

#### 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 minor 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 24 or higher. Students with an ACT Mathematics score less than 24 will be placed in the appropriate 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 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 ENVIRONMENTAL SCIENCE EMPHASIS**

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 prepare 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 the fields of environmental science or conservation or pursuing advanced studies.

			FALL SEMESTER					SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRAD
		CIT 150	Spreadsheets & Database Prin	•	3		ENG 201	Advanced Composition	•	3	
		NRE 120	Discussions in Environ Science (CT)	•	3		BSC 120/L	Principles of Biology I / Lab	•	4	
E		MTH 140	Applied Calculus	• •	3		GLY 200	The Dynamic Earth	٠	3	
ONE		ENG 101	Beginning Composition	•	3		GLY 210L	Earth Materials Lab	•	1	
<b>A</b> R		FYS 100	First Year Sem Crit Thinking	•	3		NRE 220	Human Dimensions of Nat Res (CT)	• •	3	
YEAR		UNI 100	Freshman First Class		1						
×											
		TOTAL HO	JURS		16		TOTAL HO	URS		14	
	Sumr	mer Term (op	vtional):								
			FALL SEMESTER	_		_	_	SPRING SEMESTER			
		CODE	COURSE NAME		LIDC	GRADE	CODE	COURSE NAME	-	LIDC	GRA
		CHM 211	Principles of Chemistry I	•	3	GRADE	BSC 121/L	Principles of Biology II / Lab	•	4	GRAI
		CHM 217	Principles of Chemistry I Lab	•	2		CHM 212	Principles of Chemistry II	•	3	
		NRE 212	Energy		2		CHM 212	Principles of Chemistry II Lab	•	2	
TWO		INRE 212	Core II Fine Arts	•	3		 NRRM 200	Analytical Methods: Statistics	•	4	
			Core II Social Science (MC/I)	•	3						
YEAR					3			Core II Humanities (WI)	•	3	
ΥE											
		TOTAL HO			14		TOTAL HO			16	
	Sumi	mer Term (op			14		TOTAL HOU	URS		10	
	Juin		dona).								
			FALL SEMESTER					SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRA
		NRE 323	Assessment II: Aquatic Ecology	•	4		NRE 490	ES/NRRM Capstone Prep	٠	3	
6-1		NRE 423	GIS and Data Systems	•	3		NRE 322	Assess I: Terrestrial Systems	٠	4	
THREE		PHY 201	College Physics I	٠	3		PHY 203	College Physics II	٠	3	
H		PHY 202	College Physics I Lab	•	1		PHY 204	College Physics II Lab	•	1	
and the second se			Free Elective		3		CMM 103	Fund Speech-Communications	•	3	
										3	
								Writing Intensive	•		
EAR								Writing Intensive	•		
		TOTAL HO	URS		14		TOTAL HO	-	•	17	
EAR	Sumr	<b>TOTAL HC</b> mer Term (op			14		TOTAL HO	-	•	17	
EAR	Sumr		otional):		14		TOTAL HO	URS	•	17	
EAR	Sumr	mer Term (op	FALL SEMESTER				_	URS SPRING SEMESTER	•		
EAR	Sumi	mer Term (op CODE	FALL SEMESTER			GRADE	CODE	SPRING SEMESTER	•		GRA
EAR	Sumi	mer Term (op <b>CODE</b> NRE 425	FALL SEMESTER COURSE NAME Water Policy and Regulations	•		GRADE	CODE NRE 470	URS SPRING SEMESTER	•		GRA
YEAR	Sum	mer Term (op CODE	FALL SEMESTER FALL SEMESTER COURSE NAME Water Policy and Regulations Principles of Ecology	•	HRS	GRADE	CODE	URS SPRING SEMESTER COURSE NAME Internship or Senior Project		HRS	GRA
UR YEAR	Sumi	mer Term (op <b>CODE</b> NRE 425	FALL SEMESTER FALL SEMESTER COURSE NAME Water Policy and Regulations Principles of Ecology Major Elective	•	HRS	GRADE	CODE NRE 470	URS SPRING SEMESTER COURSE NAME Internship or Senior Project Major Elective		<b>HRS</b> 3	GRA
OUR YEAR	Sumi	mer Term (op <b>CODE</b> NRE 425	FALL SEMESTER FALL SEMESTER COURSE NAME Water Policy and Regulations Principles of Ecology Major Elective Major Elective	•	<b>HRS</b> 3	GRADE	CODE NRE 470	URS SPRING SEMESTER COURSE NAME Internship or Senior Project Major Elective Major Elective		HRS 3 3 3 3	GRA
FOUR YEAR	Sumi	mer Term (op <b>CODE</b> NRE 425	FALL SEMESTER FALL SEMESTER COURSE NAME Water Policy and Regulations Principles of Ecology Major Elective	•	HRS 3 4 3	GRADE	CODE NRE 470	URS SPRING SEMESTER COURSE NAME Internship or Senior Project Major Elective		<b>HRS</b> 3	GRA
FOUR YEAR	Sum	mer Term (op <b>CODE</b> NRE 425	FALL SEMESTER FALL SEMESTER COURSE NAME Water Policy and Regulations Principles of Ecology Major Elective Major Elective	•	HRS 3 4 3 3	GRADE	CODE NRE 470	URS SPRING SEMESTER COURSE NAME Internship or Senior Project Major Elective Major Elective		HRS 3 3 3 3	GRA
OUR YEAR	Sumi	mer Term (op <b>CODE</b> NRE 425	FALL SEMESTER FALL SEMESTER COURSE NAME Water Policy and Regulations Principles of Ecology Major Elective Major Elective	•	HRS 3 4 3 3	GRADE	CODE NRE 470	URS SPRING SEMESTER COURSE NAME Internship or Senior Project Major Elective Major Elective		HRS 3 3 3 3	GRA
FOUR YEAR	Sum	mer Term (op <b>CODE</b> NRE 425	Arrivational): FALL SEMESTER FOURSE NAME Water Policy and Regulations Principles of Ecology Major Elective Major Elective Major Elective	•	HRS 3 4 3 3	GRADE	CODE NRE 470	URS SPRING SEMESTER COURSE NAME Internship or Senior Project Major Elective Major Elective Free Elective		HRS 3 3 3 3	GRA

### 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 REOUIREMENTS**

- 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 SCIENCE – 2024-2025**

## **YEAR ONE**



Have guestions? 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



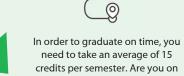


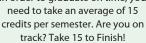
Science Association, SCUBA Club, or other organization.



Join the Marshall Environmental







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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**YEAR TWO** 



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.

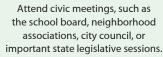
Run for Student Government and

represent your fellow students

while making a long-term

difference on Marshall's Campus.

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

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



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.



Run for Student Government and

represent your fellow students

while making a long-term

**YEAR THREE** 



Conservation and sustainability outreach is available. Join up!

## **YEAR FOUR**



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



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



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.

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.

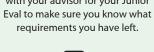


### TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

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

#### ASSOCIATED CAREERS

- Quality Assurance/Control
- Product Development
- Process Development
- Analysis
- Environmental Analysis
- Chemical Engineer
- Marketing
- Land Use Manager
- Water/Wetlands Manager
- Conservationist



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



Conservation and sustainability outreach is available. Join up!



Pursue research and funding opportunities for undergraduates.



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