

ENVIRONMENTAL SCIENCE APPLIED ENVIRONMENTAL

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: CRITICAL THINKING

CODE	COURSE NAME	HRS	GRADE
FYS 100	First Year Seminar	3	_____
NRE 220	Critical Thinking Course	3	_____
NRE 120	Critical Thinking Course	3	_____
Additional University Requirements			
_____	Writing Intensive	3	_____
_____	Writing Intensive	3	_____
_____	Multicultural or International	3	_____
NRE 491	Capstone	3	_____

CORE 2:

CODE	COURSE NAME	HRS	GRADE
ENG 101	Beginning Composition	3	_____
ENG 201	Advanced Composition	3	_____
CMM 103	Fund Speech-Communication	3	_____
MTH140	Applied Calculus	3	_____
_____	Core II Humanities	3	_____
_____	Core II Social Science	3	_____
_____	Core II Fine Arts	3	_____
BSC 120 or NRE 111	Principles of Biology or Living Systems	4	_____

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

AREA OF EMPHASIS-SPECIFIC

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

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

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 importance of this course in your plan of study.

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	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE		
YEAR ONE	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	
	🌿 MTH 140	Applied Calculus	●◆	3		or NRE 111	Living Systems			
	🌿 ENG 101	Beginning Composition	●	3	GLY 200	The Dynamic Earth	◆	3		
	FYS 100	First Year Seminar	●	3	GLY 210L	Earth Materials Lab	◆	1		
	UNI 100	Freshman First Class		1	NRE 220	Human Dimensions of Nat Res (CT)	●◆	3		
	TOTAL HOURS		16		TOTAL HOURS		14			
	Summer Term (optional):									
YEAR TWO	FALL SEMESTER				SPRING SEMESTER					
	🌿	CHM 211	Principles of Chemistry I	◆	3	NRE 212 or	Energy or College Physics	◆	3-4	
	🌿	CHM 217	Principles of Chemistry I Lab	◆	2	PHY 201/202				
		ENG 201	Advanced Composition	●	3	🌿	CHM 212	Principles of Chemistry II	◆	3
			Core II Fine Arts	●	3	🌿	CHM 218	Principles of Chemistry II Lab	◆	2
			Core II Social Science (M/I)	●	3	NRRM 200	Analytical Methods: Statistics	◆	4	
		Free Elective		1	CIT 264	Technology Foundations	◆	3		
	TOTAL HOURS		15		TOTAL HOURS		15-16			
	Summer Term (optional):									
YEAR THREE	FALL SEMESTER				SPRING SEMESTER					
	🌿	NRE 323	Assessment II: Aquatic Ecology	◆	4	NRE 322	Assess I: Terrestrial Systems	◆	4	
	🌿	NRE 423	GIS and Data Systems	◆	3	NRE 321	Resol Environ Problems	◆	3	
		CIT 260	Intrumentation	◆	3	NRE 490	ES/NRRM Capstone Prep	◆	3	
		NRE 320	Nature Enviro Problems	◆	3		Major Elective	◆	3	
			Humanities (WI)	●	3		Major Elective	◆	3	
	TOTAL HOURS		16		TOTAL HOURS		16			
	Summer Term (optional):									
YEAR FOUR	FALL SEMESTER				SPRING SEMESTER					
		NRE 425	Water Policy and Regulations	◆	3	NRE 470	Internship or Senior Project	●◆	3	
			Major Elective	◆	3	or 491				
			Major Elective	◆	3	NRE 435	Biomonitoring	◆	3	
			Major Elective	◆	3		Major Elective	◆	3	
			Writing Intensive	●	3		Free Elective		3	
	TOTAL HOURS		15		TOTAL HOURS		12			
	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 importance of this course in your plan of study.