





























# ENVIRONMENTAL SCIENCE, EMPHASIS

 - General Education Course











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

## Major

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 <https://www.marshall.edu/gened/>.

Code	Title	Credit Hours
<b>Core Curriculum</b>		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
NRE 120 	Discussions in Envriion Science	3
NRE 220 	Human Dimensions of Nat Res	3
<i>Core 2</i>		
ENG 101  	Beginning Composition	3
ENG 201 	Advanced Composition	3
CMM 103  	Fund Speech-Communication	3
MTH 140  	Applied Calculus	3
Core II Humanities		3
Core II Social Science		3
Core II Fine Arts		3
BSC 120  	Principles of Biology (Core II Physical/Nat Science)	4
<i>Additional University Requirements</i>		
Writing Intensive		3
Writing Intensive		3
Multicultural or International		3
NRE 491 	ES Senior Capstone	3
<b>Major-Specific</b>		
IST 150	Spreadsheet & Database Prin	3
MTH 140  	Applied Calculus	3
NRE 120 	Discussions in Envriion Science (CT)	3
NRE 220 	Human Dimensions of Nat Res (CT)	3
CHM 211  	Principles of Chemistry I	3
CHM 217  	Principles of Chem Lab I	2
CHM 212  	Principles Chemistry II	3
CHM 218  	Principles of Chem Lab II	2
NRE 425	Water Policy and Regulations	3
NRRM 200	Analytical Methods: Statistics	4
NRE 323 	Assessment II: Aquatic Ecology	4
NRE 423 	GIS and Data Systems	3
NRE 470	ES Internship (Senior Project)	3
or NRE 491 	ES Senior Capstone	
NRE 490	ES/NRRM Capstone Prep	3


## Area of Emphasis-Specific

BSC 120  	Principles of Biology	4
BSC 121 	Principles of Biology	4
PHY 201 	College Physics I	3
PHY 202  	General Physics I Laboratory	1
PHY 203 	College Physics II	3
PHY 204 	General Physics 2 Laboratory	1
BSC 320	Principles of Ecology	4
NRE 212	Energy	3
NRE 322	Assess I: Terrestrial Systems	4
GLY 200 	The Dynamic Earth	3
GLY 210L 	Earth Materials Lab	1
Major Elective		4
Major Elective		3
Major Elective		3
Major Elective		3
Free Elective		3
Free Elective		3
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 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 27 or higher. Students with an ACT Mathematics score less than 27 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 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.

 - General Education Course

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

## Four Year Plan

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.

Course	Title	Credit Hours
<b>First Year</b>		
<b>First Semester</b>		
IST 150	Spreadsheet & Database Prin	3
NRE 120	Discussions in Envrion Science	3
MTH 140	Applied Calculus	3
ENG 101	Beginning Composition	3
FYS 100	First Yr Sem Critical Thinking	3
UNI 100	Freshman First Class	1
Credit Hours		16
<b>Second Semester</b>		
ENG 201	Advanced Composition	3
BSC 120	Principles of Biology	4
GLY 200	The Dynamic Earth	3
GLY 210L	Earth Materials Lab	1
NRE 220	Human Dimensions of Nat Res (CT)	3
Credit Hours		14
<b>Second Year</b>		
<b>First Semester</b>		
CHM 211	Principles of Chemistry I	3
CHM 217	Principles of Chem Lab I	2
NRE 212	Energy	3
Core II Fine Arts		3
Core II Social Science (MC/I)		3
Credit Hours		14
<b>Second Semester</b>		
BSC 121	Principles of Biology	4
CHM 212	Principles Chemistry II	3
CHM 218	Principles of Chem Lab II	2
NRRM 200	Analytical Methods: Statistics	4
Core II Humanities (WI)		3
Credit Hours		16
<b>Third Year</b>		
<b>First Semester</b>		
NRE 323	Assessment II: Aquatic Ecology	4
NRE 423	GIS and Data Systems	3
PHY 201	College Physics I	3
PHY 202	General Physics I Laboratory	1
Free Elective		3
Credit Hours		14

### Second Semester

NRE 490	ES/NRRM Capstone Prep	3
NRE 322	Assess I: Terrestrial Systems	4
PHY 203	College Physics II	3
PHY 204	General Physics 2 Laboratory	1
CMM 103	Fund Speech-Communication	3
Writing Intensive		3
Credit Hours		17

### Fourth Year

#### First Semester

NRE 425	Water Policy and Regulations	3
BSC 320	Principles of Ecology	4
Major Elective		3
Major Elective		3
Major Elective		4
Credit Hours		17

#### Second Semester

NRE 470	ES Internship (Senior Project)	3
or NRE 491	or ES Senior Capstone	
Major Elective		3
Major Elective		3
Free Elective		3
Credit Hours		12
Total Credit Hours		120