## TRONMENTAL SCIENCE

REQUIREMENTS

**CORE CURRICULUM** 

CODE

**FYS 100** 

**NRE 220** 

NRE 120

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.

CODE

**CORE 1: CRITICAL THINKING** 

	HRS	GRADE
•	3	
• •	3	

**COURSE NAME** 

First Year Seminar

Critical Thinking Course

Critical Thinking Course

Addition	al University Requirements		
	Writing Intensive	3	
	Writing Intensive	3	
	Multicultural or International	3	
NRE 491	Capstone	3	

### CORE 2:

CODL	COOKSETAME			GIIADE
ENG 101	Beginning Composition	•	3	
ENG 201	<b>Advanced Composition</b>	•	3	
CMM 103	Fund Speech-Communication	•	3	
MTH140	Applied Calculus	• •	3	
	Core II Humanities	•	3	
	Core II Social Science	•	3	
	ENG 101 ENG 201 CMM 103	ENG 101 Beginning Composition ENG 201 Advanced Composition CMM 103 Fund Speech-Communication MTH140 Applied Calculus Core II Humanities	ENG 101 Beginning Composition  ENG 201 Advanced Composition  CMM 103 Fund Speech-Communication  MTH140 Applied Calculus  Core II Humanities	ENG 101 Beginning Composition 3 ENG 201 Advanced Composition 3 CMM 103 Fund Speech-Communication 3 MTH140 Applied Calculus 3 Core II Humanities 3

COURSE NAME

	Core il social science		,
	Core II Fine Arts	•	3
BSC 120/L	Principles of Biology	•	4

HRS GRADE

## **MAJOR-SPECIFIC**

Area of Empahsis

♦ Major Requirement

College Requirement

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

	CODE	COURSE NAME		⊔DC	GRADE
	CODE	COORSE NAME		IINS	GRADE
	CIT 150	Spreadsheets & Database Prin	<b>*</b>	3	
•	MTH 140	Applied Calculus	• •	3	
	NRE 120	Discussion in Environ Science (CT)	• •	3	
	NRE 220	Human Dimensions of Nat Res (CT)	• •	3	
•	CHM 211	Principles of Chemistry I	•	3	
•	CHM 217	Principles of Chemistry I Lab	•	2	
<b>**</b>	CHM 212	Principles of Chemistry II	•	3	
•	CHM 218	Principles of Chemistry II Lab	•	2	

	CODE	COURSE NAME		HRS	GRADE
	NRRM 200	Analytical Methods: Statistics	•	4	
<b>**</b>	NRE 323	Assessment II: Aquatic Ecology	•	4	
<b>**</b>	NRE 423	GIS and Data Systems	•	3	
	NRE 425	Water Policy and Regulations	•	3	
	NRE 470	Internship or Senior Project	• •	3	
	or 491				
	NRE 490	ES/NRRM Capstone Prep	•	3	

## AREA OF EMPHASIS-SPECIFIC

CODE	COURSE NAME			GRADE	CODE	COURSE NAME		HRS	GRADE
BSC 120/L	Principles of Biology I / Lab	•	4			Major Elective	•	3	
BSC 121/L	Principles of Biology II / Lab	•	4			Major Elective	•	3	
PHY 201	College Physics	•	3			Major Elective	•	3	
PHY 202	College Physics	•	1			Major Elective	•	3	
PHY 203	College Physics	•	3			Free Elective		3	
PHY 204	College Physics	•	1			Free Elective		3	
BSC 320 or	Principles of Ecology or	•	4			Free Elective		3	
NRE 322	Assessment I: Terrestrial Systems					Free Elective		2	
	Major Elective	•	4			Free Elective		2	
	Major Elective	•	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 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 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 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.

# VIRONMENTAL SCIENCE

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 in the

		FALL SEMESTER						SPRING SEMESTER			
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GR
	CIT 150	Spreadsheets & Database Prin	•	3			ENG 201	Advanced Composition	•	3	
	NRE 120	Discussions in Environ Science (CT)	• •	3		<b>***</b>	CMM 103	Fund Speech-Communications	•	3	
1	MTH 140	Applied Calculus	• •	3			BSC 120/L	Principles of Biology I / Lab	•	4	
1	ENG 101	Beginning Composition	•	3			NRE 220	Human Dimensions of Nat Res (CT)	• •	3	
	FYS 100	First Year Sem Crit Thinking	•	3				Core II Humanities (WI)	•	3	
	UNI 100	Freshman First Class		1							
	TOTAL HO	URS		16			TOTAL HOU	JRS		16	
Sun	nmer Term (op	tional):									
		FALL SEMESTER						SPRING SEMESTER			
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GR
17	CHM 211	Principles of Chemistry I	•	3			BSC 121/L	Principles of Biology II / Lab	•	4	_
1	CHM 217	Principles of Chemistry I Lab	•	2			CHM 212	Principles of Chemistry II	•	3	
		Free Elective		3		<b>***</b>	CHM 218	Principles of Chemistry II Lab	•	2	_
		Core II Fine Arts	•	3			NRRM 200	Analytical Methods: Statistics	<b>*</b>	4	_
_		Core II Social Science (M/I)	•	3				Free Elective		3	_
	TOTAL HO	URS		14			TOTAL HOL	JRS		16	;
Sun	nmer Term (op	tional):									
		FALL SEMESTER						SPRING SEMESTER			
	CODE	FALL SEMESTER COURSE NAME		HRS	GRADE		CODE	SPRING SEMESTER		HRS	GR
•	CODE NRE 323		•	HRS 4	GRADE		CODE (BSC 320 or	COURSE NAME	•	HRS 4	GR
*		COURSE NAME	* *		GRADE			COURSE NAME	•		GR
<b>P</b>	NRE 323	COURSE NAME Assessment II: Aquatic Ecology		4	GRADE		BSC 320 or	COURSE NAME  Principles of Ecology or	•		GR
<b>*</b>	NRE 323 NRE 423	COURSE NAME Assessment II: Aquatic Ecology GIS and Data Systems	•	4 3	GRADE		BSC 320 or NRE 322	COURSE NAME  Principles of Ecology or  Assessment I: Terrestrial Systems	•	4	GR
•	NRE 323 NRE 423 PHY 201	COURSE NAME  Assessment II: Aquatic Ecology  GIS and Data Systems  College Physics I	•	4 3	GRADE		BSC 320 or NRE 322 PHY 203	COURSE NAME  Principles of Ecology or  Assessment I: Terrestrial Systems  College Physics II	•	4	GR
<del>(*</del>	NRE 323 NRE 423 PHY 201	COURSE NAME  Assessment II: Aquatic Ecology  GIS and Data Systems  College Physics I  General Physics I Lab	•	4 3 3 1	GRADE		BSC 320 or NRE 322 PHY 203 PHY 204	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab	•	3	GR
	NRE 323 NRE 423 PHY 201	COURSE NAME  Assessment II: Aquatic Ecology  GIS and Data Systems  College Physics I  General Physics I Lab  Major Elective	•	4 3 3 1	GRADE		BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive	•	4 3 1 3	GR
Sun	NRE 323 NRE 423 PHY 201 PHY 202	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective	•	4 3 3 1 4	GRADE		BSC 320 or NRE 322 PHY 203 PHY 204	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive	•	3 1 3 3	GR
Sun	NRE 323 NRE 423 PHY 201 PHY 202 TOTAL HO	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective  FALL SEMESTER	•	4 3 3 1 4			BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  SPRING SEMESTER	•	3 1 3 3	
Sun	NRE 323 NRE 423 PHY 201 PHY 202 TOTAL HO	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective  OURS tional): FALL SEMESTER COURSE NAME	•	4 3 3 1 4	GRADE		BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490 TOTAL HOL	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  SPRING SEMESTER COURSE NAME	•	3 1 3 3	
Sun	NRE 323 NRE 423 PHY 201 PHY 202 TOTAL HO	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective  OURS tional):  FALL SEMESTER COURSE NAME Water Policy and Regulations	•	4 3 3 1 4			BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490 TOTAL HOLE CODE NRE 470	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  SPRING SEMESTER	•	3 1 3 3	
Sun	NRE 323 NRE 423 PHY 201 PHY 202 TOTAL HO	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective  CURS tional):  FALL SEMESTER COURSE NAME Water Policy and Regulations Major Elective	•	4 3 3 1 4 15			BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490 TOTAL HOL	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  SPRING SEMESTER COURSE NAME Internship or Senior Project	•	4 3 1 3 3 14 HRS	
Sun	NRE 323 NRE 423 PHY 201 PHY 202 TOTAL HO	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective  OURS tional):  FALL SEMESTER COURSE NAME Water Policy and Regulations	•	4 3 3 1 4 15			BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490 TOTAL HOLE CODE NRE 470	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  SPRING SEMESTER COURSE NAME Internship or Senior Project  Major Elective	•	3 1 3 3 14	
Sun	NRE 323 NRE 423 PHY 201 PHY 202 TOTAL HO	Assessment II: Aquatic Ecology GIS and Data Systems College Physics I General Physics I Lab Major Elective  CURS tional):  FALL SEMESTER COURSE NAME Water Policy and Regulations Major Elective	•	4 3 3 1 4 <b>15</b> <b>HRS</b> 3			BSC 320 or NRE 322 PHY 203 PHY 204 NRE 490 TOTAL HOLE CODE NRE 470	Principles of Ecology or Assessment I: Terrestrial Systems College Physics II General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  SPRING SEMESTER COURSE NAME Internship or Senior Project	•	3 1 3 3 14	

**TOTAL HOURS** 

**TOTAL HOURS** 

Summer Term (optional):

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.