## **ENVIRONMENTAL SCIENCE** CONSERVATION AND WILDLIFE

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend

	ICAL THINKING				COR	E 2:				
CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Sem Crit Thinking	•	3		<b>**</b>	ENG 101	Beginning Composition	•	3	
NRE 220	Critical Thinking Course	• •	3			ENG 201	Advanced Composition	•	3	
NRE 120	Critical Thinking Course	• •	3		<b>**</b>	CMM 103	Fund Speech-Communication	•	3	
					<b>***</b>	MTH140	Applied Calculus	• •	3	
Additional 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	Physical/Nat Science Elective	•	4	
NRE 491	Capstone		3							
AJOR-SPEC Environment CODE	CIFIC al Sciences majors are required to take COURSE NAME	the fo		g courses:		CODE	COURSE NAME		HRS	GRADE
IST 150	Spreadsheet & Database Prin	•	3			NRRM 200	Analytical Methods: Statistics	•	4	
MTH 140	Applied Calculus	• •	3		<b>**</b>	NRE 323	Assessment II: Aquatic Ecology	•	4	
NRE 120	Discussion in Environ Science (CT)	• •	3		<b>***</b>	NRE 423	GIS and Data Systems	•	3	
NRE 220	Human Dimensions of Nat Res (CT)	• •	3			NRE 470	Internship or Senior Project	• •	3	
CHM 211	Principles of Chemistry 1	•	3			or 491				
CHM 217	Principles of Chemistry 1 Lab	•	2			NRE 490	ES/NRRM Capstone Prep	•	3	
CHM 212	Principles of Chemistry II	•	3							
	Principles of Chemistry II Lab	•	2							

CODE	COURSE WANTE			GILADE	CODE	COOKSENAME		1113	GIIADE
BSC 120	Principles of Biology	•	4			Major Elective	•	3	
BSC 121	Principles of Biology II	•	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			Major 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		3	
NRE 425	Water Policy and Regulations	•	3 _			Free Elective		3	
	Major Elective	•	3			Free Elective		2	

### 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 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.

FOUR YEAR PLAN COLLEGE OF SCIENCE 2019-2020

Summer Term (optional):

### **ENVIRONMENTAL SCIENCE** CONSERVATION AND WILDLIFE

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

MY ADVISOR'S NAME IS:

		vironmenta										
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
		IST 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	
旦	<b>₹</b>	MTH 140	Applied Calculus	• •	3			BSC 120	Principles of Biology	• •	4	
ONE	<b>**</b>	ENG 101	Beginning Composition	•	3			NRE 220	Human Dimensions of Nat Res (CT)	• •	3	
H		FYS 100	First Year Sem Crit Thinking	•	3				Core II Humanities (WI)	•	3	
YEAR		UNI 100	Freshman First Class		1							
		TOTAL HO	DURS		16			TOTAL HO	URS		16	
	Sum	mer Term (op	otional):									
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
	7	CHM 211	Principles of Chemistry I	•	3			BSC 121	Principles of Biology	•	4	
		CHM 217	Principles of Chemistry I Lab	•	2			CHM 212	Principles of Chemistry II	•	3	
0			Free Elective		3			CHM 218	Principles of Chemistry II Lab	•	2	
TWO			Core II Fine Arts	•	3			NRRM 200	Analytical Methods: Statistics	•	4	
YEAR			Core II Social Science (M/I)	•	3				Free Elective		3	
		TOTAL HO	DURS		14			TOTAL HO	URS		16	
	Sum	mer Term (op	otional):									
			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
	<b>₹</b>	NRE 323	Assessment II: Aquatic Ecology	•	4			BSC 320 or	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	4	
臼		NRE 423	GIS and Data Systems	•	3			NRE 322	Assessment I: Terrestrial Systems			
邑		PHY 201	College Physics I					DL IV 202	C II DI : II		~	
$\mathbb{E}$				•	3			PHY 203	College Physics II	•	3	
HR		PHY 202	General Physics I Lab	•	1			PHY 204	General Physics II Lab	•	1	
		PHY 202							General Physics II Lab ES/NRRM Capstone Prep		1	
AR		PHY 202	General Physics I Lab		1			PHY 204	General Physics II Lab		1	
AR		TOTAL HO	General Physics I Lab  Major Elective  DURS		1			PHY 204	General Physics II Lab ES/NRRM Capstone Prep Writing Intensive		1	
YEAR THREE	Sum		General Physics I Lab  Major Elective  DURS		1			PHY 204 NRE 490	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS		1 3 3	
AR	Sum	TOTAL HO	General Physics I Lab Major Elective  DURS  otional):  FALL SEMESTER		1 3			PHY 204 NRE 490 TOTAL HO	General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  URS  SPRING SEMESTER		1 3 3	
AR	Sum	TOTAL HO	General Physics   Lab Major Elective  DURS Ditional):  FALL SEMESTER COURSE NAME	•	1 3 14 HRS	GRADE		PHY 204 NRE 490 TOTAL HO CODE	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS  SPRING SEMESTER  COURSE NAME	•	1 3 3 14 HRS	GRAD
AR	Sum	TOTAL HO	General Physics   Lab Major Elective  DURS Ditional):  FALL SEMESTER COURSE NAME Water Policy and Regulations		1 3 14 HRS 4	GRADE		PHY 204 NRE 490 TOTAL HO  CODE NRE 470	General Physics II Lab ES/NRRM Capstone Prep Writing Intensive  URS  SPRING SEMESTER		1 3 3	GRAD
YEAR	Sum	TOTAL HO	General Physics I Lab Major Elective  DURS Ditional):  FALL SEMESTER  COURSE NAME  Water Policy and Regulations Major Elective	•	1 3 14 HRS 4 3	GRADE		PHY 204 NRE 490 TOTAL HO CODE	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS  SPRING SEMESTER  COURSE NAME  Internship or Senior Project	•	1 3 3 14 HRS 3	GRAD
YEAR	Sum	TOTAL HO	General Physics   Lab Major Elective  DURS Ditional):  FALL SEMESTER  COURSE NAME  Water Policy and Regulations Major Elective Major Elective	•	1 3 14 HRS 4 3 3	GRADE		PHY 204 NRE 490 TOTAL HO  CODE NRE 470	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS  SPRING SEMESTER  COURSE NAME  Internship or Senior Project  Major Elective	•	1 3 3 14 HRS 3	GRAD
YEAR	Sum	TOTAL HO	General Physics I Lab Major Elective  DURS Ditional):  FALL SEMESTER  COURSE NAME  Water Policy and Regulations Major Elective Major Elective Free Elective	•	1 3 14 HRS 4 3 3 3 3	GRADE		PHY 204 NRE 490 TOTAL HO  CODE NRE 470	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS  SPRING SEMESTER  COURSE NAME  Internship or Senior Project  Major Elective  Major Elective	•	1 3 3 14 HRS 3 3 3 3	GRAE
YEAR	Sum	TOTAL HO	General Physics   Lab Major Elective  DURS Ditional):  FALL SEMESTER  COURSE NAME  Water Policy and Regulations Major Elective Major Elective	•	1 3 14 HRS 4 3 3	GRADE		PHY 204 NRE 490 TOTAL HO  CODE NRE 470	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS  SPRING SEMESTER  COURSE NAME  Internship or Senior Project  Major Elective  Major Elective  Major Elective	•	1 3 3 14 HRS 3 3 3 3 3 3	GRAD
AR	Sum	TOTAL HO	General Physics I Lab Major Elective  DURS Ditional):  FALL SEMESTER  COURSE NAME  Water Policy and Regulations Major Elective Major Elective Free Elective	•	1 3 14 HRS 4 3 3 3 3	GRADE		PHY 204 NRE 490 TOTAL HO  CODE NRE 470	General Physics II Lab  ES/NRRM Capstone Prep  Writing Intensive  URS  SPRING SEMESTER  COURSE NAME  Internship or Senior Project  Major Elective  Major Elective	•	1 3 3 14 HRS 3 3 3 3	GRAD

### **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 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.

# CONSERVATION AND WILDLIFE - 2019-2020

### YEAR ONE



Have questions? Need to talk? You already have a Friend-At-Marshall ready to help you succeed. Find your FAM Peer Mentor here: www.marshall.edu/fam



No need to wait until graduate school. Discuss undergraduate research opportunities with faculty in your major right now.



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

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.

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.



Stay on the Herd Path and come to class! Class attendance is more important to your success than your high school GPA, your class standing, or your ACT/SAT scores.





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!



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

Get involved! Strengthen your

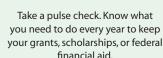
resume by gaining valuable field

and laboratory experience.

Don't enter your field with zero

experience! Secure an internship

related to your field of study.



Attend civic meetings, such as

the school board, neighborhood

associations, city council, or

important state legislative sessions.

Join the Marshall Environmental

Science Association, SCUBA Club, or

other organization.

**YEAR TWO** 

### 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.



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





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.



Conservation and sustainability outreach is available. Join up!

# **YEAR FOUR**



graduate? Meet with your advisor for your Senior Eval to see what requirements you have left.



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



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.





Conservation and sustainability outreach is available. Join up!



Pursue research and funding opportunities for undergraduates.





TRANSFERABLE SKILLS

Scientific Knowledge

Organizational Skills

· Attention to Detail

Land Use Manager

Fishery Manager

Conservationist

**ASSOCIATED CAREERS** 

· Water/Wetlands Manager

· Forestry and Wildlife Manager

Adaptability

Technological Literacy

ASSOCIATED WITH THIS MAJOR

· Ability to Work as Part of a Team

Marshall University College of Science 1 John Marshall Drive Huntington, WV 25755 1-304-696-3170 cos@marshall.edu marshall.edu/cos







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



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.

