# CURRICULUM PLAN COLLEGE OF SCIENCE 2020-2021 **ENVIRONMENTAL SCIENCE CONSERVATION AND WILDLIFE** 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 | ICAL THINKING                  |     |     |       | C | ORE 2:    |                               |     |           |
|--------------|--------------------------------|-----|-----|-------|---|-----------|-------------------------------|-----|-----------|
| CODE         | COURSE NAME                    |     | HRS | GRADE |   | CODE      | COURSE NAME                   |     | HRS GRADE |
| FYS 100      | First Year Sem Crit Thinking   | ٠   | 3   |       |   | 🗬 ENG 101 | Beginning Composition         | •   | 3         |
| NRE 220      | Critical Thinking Course       | • • | 3   |       |   | ENG 201   | Advanced Composition          | ٠   | 3         |
| NRE 120      | Critical Thinking Course       | • • | 3   |       |   | 🗬 CMM 103 | Fund Speech-Communication     | ٠   | 3         |
|              |                                |     |     |       |   | MTH140    | Applied Calculus              | • • | 3         |
| Additiona    | 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   | Physical/Nat Science Elective | 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 |
|---|---------|------------------------------------|-----|-----|-------|---|----------|--------------------------------|-----|-----|-------|
|   | IST 150 | Spreadsheet & Database Prin        | ٠   | 3   |       |   | NRRM 200 | Analytical Methods: Statistics | •   | 4   |       |
| 1 | MTH 140 | Applied Calculus                   | • • | 3   |       | - | NRE 323  | Assessment II: Aquatic Ecology | ٠   | 4   |       |
|   | NRE 120 | Discussion in Environ Science (CT) | • • | 3   |       | - | NRE 423  | GIS and Data Systems           | ٠   | 3   |       |
|   | NRE 220 | Human Dimensions of Nat Res (CT)   | • • | 3   |       |   | NRE 425  | Water Policy and Regulations   | 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      | ٠   | 2   |       |   | or 491   |                                |     |     |       |
| 1 | CHM 212 | Principles of Chemistry II         | ٠   | 3   |       |   | NRE 490  | ES/NRRM Capstone Prep          | ٠   | 3   |       |
|   | CHM 218 | Principles of Chemistry II Lab     | ٠   | 2   |       |   |          |                                |     |     |       |

#### AREA OF EMPHASIS-SPECIFIC

Students who wish to add an area of emphasis in Conservation and Wildlife must take the following courses:

| CODE      | COURSE NAME                       |   | HRS | GRADE | CODE | COURSE NAME    |   | HRS | GRADE |
|-----------|-----------------------------------|---|-----|-------|------|----------------|---|-----|-------|
| BSC 120   | Principles of Biology             | ٠ | 4   |       |      | Major Elective | • | 3   |       |
| BSC 121   | Principles of Biology II          | ٠ | 4   |       |      | Major Elective | • | 3   |       |
| PHY 201   | College Physics                   | ٠ | 3   |       |      | Major Elective | • | 3   |       |
| PHY 202   | College Physics                   | ٠ | 1   |       |      | Major Elective | • | 3   |       |
| PHY 203   | College Physics                   | ٠ | 3   |       |      | Free Elective  |   | 3   |       |
| PHY 204   | College Physics                   | ٠ | 1   |       |      | Free Elective  |   | 3   |       |
| BSC 320 c | or Principles of Ecology or       | ٠ | 4   |       |      | Free Elective  |   | 3   |       |
| NRE 322   | Assessment I: Terrestrial Systems |   |     |       |      | Free Elective  |   | 3   |       |
|           | Major Elective                    | ٠ | 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.

MY ADVISOR'S NAME IS:

• 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 2020-2021 **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 fields of environmental science or conservation or pursuing advanced studies.

|          |       |                                 | FALL SEMESTER  |     |                         |       |                 | SPRING SEMESTER   |     |                  |      |
|----------|-------|---------------------------------|--|-----|-------------------------|-------|-----------------|---|-----|------------------|------|
|          |       | CODE                            | COURSE NAME  |     | HRS                     | GRADE | CODE            | COURSE NAME   |     | HRS              | GRA  |
|          |       | IST 150                         | Spreadsheets & Database Prin   | ٠   | 3                       |       | ENG 201         | Advanced Composition  | •   | 3                |      |
|          |       | NRE 120                         | Discussions in Environ Science (CT)  | • • | 3                       |       | CMM 103         | Fund Speech-Communications  | •   | 3                |      |
| E        |       | MTH 140                         | Applied Calculus   | • • | 3                       |       | BSC 120         | Principles of Biology   | • • | 4                |      |
| ONE      |       | 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)   | ٠   | 3                |      |
| YEAR     |       | UNI 100                         | Freshman First Class   |     | 1                       |       |                 |   |     |                  |      |
| ×        |       |                                 |  |     |                         |       |                 |   |     |                  |      |
|          |       | TOTAL HO                        | OURS   |     | 16                      |       | TOTAL HO        | URS   |     | 16               |      |
|          | Sum   | mer Term (op                    | otional):  |     |                         |       |                 |   |     |                  |      |
|          |       |                                 |  |     |                         | _     |                 |   | _   |                  |      |
|          |       | CODE                            | FALL SEMESTER  | -   | LIDC                    | CRADE | CODE            | SPRING SEMESTER   | -   | LIDC             | CD 4 |
|          |       | CODE                            | COURSE NAME  |     |                         | GRADE |                 | COURSE NAME   |     | HKS              | GRA  |
|          |       | CHM 211                         | Principles of Chemistry I  | •   | 3                       |       | BSC 121         | Principles of Biology   | •   | 4                |      |
|          | ेर चर | CHM 217                         | Principles of Chemistry I Lab  | •   | 2                       |       | CHM 212         | Principles of Chemistry II  | •   | 3                |      |
| TWO      |       |                                 | Free Elective  |     | 3                       |       | CHM 218         | Principles of Chemistry II Lab  | •   | 2                |      |
| H        |       |                                 | Core II Fine Arts  | •   | 3                       |       | NRRM 200        | Analytical Methods: Statistics  | •   | 4                |      |
| YEAR     |       |                                 | Core II Social Science (M/I)   | •   | 3                       |       |                 | Free Elective   |     | 3                |      |
| E        |       |                                 |  |     |                         |       |                 |   |     |                  |      |
|          |       |                                 |  |     |                         |       |                 |   |     |                  |      |
|          |       | TOTAL HO                        |  |     | 14                      |       | TOTAL HO        | URS   |     | 16               |      |
|          | Sum   | mer Term (op                    | otional):  |     |                         |       |                 |   |     |                  |      |
|          |       |                                 | FALL SEMESTER  |     |                         |       |                 | SPRING SEMESTER   |     |                  |      |
|          |       | CODE                            | COURSE NAME  |     | HRS                     | GRADE | CODE            | COURSE NAME   |     | HRS              | GRA  |
|          |       | NRE 323                         | Assessment II: Aquatic Ecology   | ٠   | 4                       |       | BSC 320 or      | Principles of Ecology or  | ٠   | 4                |      |
|          | -     | NRE 423                         | GIS and Data Systems   | •   | 3                       |       | NRE 322         | Assessment I: Terrestrial Systems   |     |                  |      |
| E<br>E   |       | PHY 201                         | College Physics I  | •   | 3                       |       | PHY 203         | College Physics II  | ٠   | 3                |      |
| THREE    |       | PHY 202                         | General Physics I Lab  | •   | 1                       |       | PHY 204         | General Physics II Lab  | ٠   | 1                |      |
|          |       |                                 | Major Elective   | •   | 4                       |       | NRE 490         | ES/NRRM Capstone Prep   | ٠   | 3                |      |
| EAR      |       |                                 | ,  |     |                         |       |                 | Writing Intensive   | •   | 3                |      |
|          |       |                                 |  |     |                         |       |                 |   |     |                  |      |
|          |       |                                 |  |     |                         |       |                 |   |     | 14               |      |
| $YE^{I}$ |       | TOTAL HO                        | URS  |     | 15                      |       | TOTAL HO        | URS   |     | •••              |      |
|          | Sum   | TOTAL HC                        |  |     | 15                      |       | TOTAL HO        | URS   |     |                  |      |
|          | Sum   | <b>TOTAL HC</b><br>mer Term (op |  |     | 15                      |       | TOTAL HO        | URS   |     |                  |      |
|          | Sum   |                                 |  |     | 15                      |       | TOTAL HO        | URS<br>SPRING SEMESTER  |     |                  |      |
|          | Sum   |                                 | tional):   |     |                         | GRADE | _               |   |     | HRS              | GRA  |
|          | Sum   | mer Term (op                    | tional):<br>FALL SEMESTER  | •   |                         | GRADE | _               | SPRING SEMESTER   | • • | HRS<br>3         | GRA  |
|          | Sum   | mer Term (op<br>CODE            | FALL SEMESTER  | •   | HRS                     | GRADE | CODE            | SPRING SEMESTER<br>COURSE NAME  | • • |                  | GRA  |
| R        | Sum   | mer Term (op<br>CODE            | FALL SEMESTER<br><b>COURSE NAME</b><br>Water Policy and Regulations  | •   | HRS<br>4                | GRADE | CODE<br>NRE 470 | SPRING SEMESTER<br>COURSE NAME  | • • |                  | GRA  |
| R        | Sum   | mer Term (op<br>CODE            | FALL SEMESTER<br>FALL SEMESTER<br>COURSE NAME<br>Water Policy and Regulations<br>Major Elective  | •   | <b>HRS</b><br>4<br>3    | GRADE | CODE<br>NRE 470 | SPRING SEMESTER<br>COURSE NAME<br>Internship or Senior Project  | • • | 3                | GRA  |
| FOUR     | Sum   | mer Term (op<br>CODE            | TALL SEMESTER<br>FALL SEMESTER<br>COURSE NAME<br>Water Policy and Regulations<br>Major Elective<br>Major Elective                                  | •   | HRS<br>4<br>3<br>3      | GRADE | CODE<br>NRE 470 | SPRING SEMESTER<br>COURSE NAME<br>Internship or Senior Project<br>Major Elective  | ••  | 3                | GRA  |
| FOUR     | Sum   | mer Term (op<br>CODE            | Attional):<br>FALL SEMESTER<br>COURSE NAME<br>Water Policy and Regulations<br>Major Elective<br>Major Elective<br>Free Elective                    | •   | HRS<br>4<br>3<br>3<br>3 | GRADE | CODE<br>NRE 470 | SPRING SEMESTER<br>COURSE NAME<br>Internship or Senior Project<br>Major Elective<br>Major Elective                                    | ••• | 3<br>4<br>3      | GR/  |
| R        | Sum   | mer Term (op<br>CODE            | Attional):<br>FALL SEMESTER<br>COURSE NAME<br>Water Policy and Regulations<br>Major Elective<br>Major Elective<br>Free Elective                    | •   | HRS<br>4<br>3<br>3<br>3 | GRADE | CODE<br>NRE 470 | SPRING SEMESTER<br>COURSE NAME<br>Internship or Senior Project<br>Major Elective<br>Major Elective<br>Major Elective                  | ••  | 3<br>4<br>3<br>3 | GR/  |
| FOUR     | Sum   | mer Term (op<br>CODE            | Attional):<br>FALL SEMESTER<br>FALL SEMESTER<br>Autor Policy and Regulations<br>Major Elective<br>Major Elective<br>Free Elective<br>Free Elective | •   | HRS<br>4<br>3<br>3<br>3 | GRADE | CODE<br>NRE 470 | SPRING SEMESTER<br>COURSE NAME<br>Internship or Senior Project<br>Major Elective<br>Major Elective<br>Major Elective<br>Free Elective | ••• | 3<br>4<br>3<br>3 | GR/  |

### 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 - 2020-2021

## **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

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Join the Marshall Environmental

Science Association, SCUBA Club, or

other organization.





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!

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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.

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.

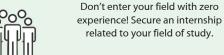
Attend civic meetings, such as the school board, neighborhood associations, city council, or important state legislative sessions.



Get involved! Strengthen your

resume by gaining valuable field

and laboratory experience.



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



Join professional associations in

Conservation and sustainability outreach is available. Join up!

**YEAR FOUR** 

**YEAR THREE** 

Run for Student Government and

represent your fellow students

while making a long-term

difference on Marshall's Campus.



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.

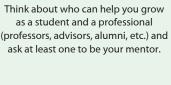


Join professional associations in your field, like: American Fisheries Society, Ecological Society of America, Association of Southeastern Biologists.



**A** 

Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.



#### TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

- Scientific Knowledge
- Organizational Skills
- Technological Literacy
- Adaptability
- Ability to Work as Part of a Team
- Attention to Detail

#### ASSOCIATED CAREERS

- Land Use Manager
- Water/Wetlands Manager
- Fishery Manager
- Forestry and Wildlife Manager
- Conservationist

Are you on track to graduate? Meet with your advisor for your Junior Eval to make sure you know what requirements you have left.

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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!



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