

College of Arts and Sciences School of Earth, Ocean and Environment Bulletin Year: 2019-2020

This course plan is a recommended sequence for this major. Courses designated as critical (!) may have a deadline for completion and/or affect time to graduation. Please see the Program Notes section for details regarding "critical courses" for this particular Program of Study.

|          |  |       |                    | Major            |               |  |       |
|----------|--|-------|--------------------|------------------|---------------|--|-------|
| Critical |  | Hours | Grade <sup>1</sup> | GPA <sup>2</sup> | Code          | Prerequisites  | Notes |
| emeste   | er One (15 Credit Hours)   |       |                    |                  |               |  |       |
| !        | MSCI 101 The Ocean Environment   | 4     | С                  |                  | CC-SCI        |  |       |
| !        | MATH 141 Calculus 1 <sup>3</sup>   | 4     | С                  |                  |               | MATH 115 or Math placement test score  |       |
| !        | CHEM 111 & 111L – General Chemistry I  | 4     | С                  |                  | PR            | MATH 115 or Math placement test score  |       |
|          | UNIV 101 The Student in the University   | 3     |                    |                  | PR/CC         |  |       |
|          | or Carolina Core Requirement <sup>4</sup>  |       |                    |                  |               |  |       |
| meste    | er Two (18 Credit Hours)   |       |                    |                  |               |  |       |
| !        | ENGL 101 Critical Reading and Composition  | 3     | С                  |                  | CC-CMW        |  |       |
|          | MSCI 102 The Living Ocean  | 4     | С                  |                  | CC-SCI        |  |       |
| !        | MATH 142 Calculus II   | 4     | С                  |                  | CC-ARP        |  |       |
| !        | CHEM 112 & 112L – General Chemistry II   | 4     | С                  |                  | PR            | CHEM 111 or 141 and MATH 111, 115<br>or higher math; Prereq or Coreq: MATH<br>122, 141 or higher math          |       |
|          | Carolina Core Requirement <sup>4</sup>   | 3     |                    |                  | CC            |  |       |
| meste    | er Three (17 Credit Hours)   |       |                    |                  |               |  |       |
| !        | ENGL 102 Rhetoric and Composition  | 3     | С                  |                  | CC-CMW        |  |       |
|          |  |       |                    |                  | CC-INF        |  |       |
|          | MSCI 311 Biology of Marine Organisms (fall only)   | 4     | С                  |                  | MR/CC-        | MSCI 102 or BIOL 101   |       |
|          |  |       |                    |                  | INT           |  |       |
| !        | PHYS 201 & 201L – General Physics I<br>or PHYS 211 & 211L – Essentials of Physics I                | 4     | С                  |                  | PR            | C or better in MATH 111/111i/112/<br>115/116/122/144 or higher ( <i>PHYS</i> 201); MATH 141 ( <i>PHYS</i> 211) |       |
|          | Foreign language <sup>5</sup> or other Carolina Core Requirement <sup>4</sup>                      | 3     |                    |                  | CC-GFL        |  |       |
|          | History <sup>6</sup>   | 3     |                    |                  | CR            |  |       |
| meste    | er Four (15 Credit Hours)  |       |                    |                  |               |  |       |
|          | MSCI 313 The Chemistry of the Sea (spring only)  | 4     | С                  |                  | MR/CC-<br>INT | MSCI 101, CHEM 111, CHEM 112 (or co-req), & MATH 141   |       |
|          | MSCI 314 Physical Oceanography (spring only)   | 4     | С                  |                  | MR/CC-<br>INT | MSCI 101, MATH 141, & PHYS 201 or 211  |       |
| !        | PHYS 202 & 202L – General Physics II<br>or PHYS 212 & 212L – Essentials of Physics II <sup>7</sup> | 4     | С                  |                  | PR            | PHYS 201 (PHYS 202); PHYS 211 and<br>MATH 142 (PHYS 212)   |       |
|          | Foreign language <sup>5</sup> or other Carolina Core Requirement <sup>4</sup>                      | 3     |                    |                  | CC-GFL        | ·  |       |
| meste    | er Five (15-17 Credit Hours)   |       |                    |                  |               |  |       |
|          | MSCI Elective (300-level and above)8   | 3-4   | С                  |                  | MR            |  |       |
|          | MSCI Elective (300-level and above)8   | 3-4   | С                  |                  | MR            |  |       |
|          | CSCE 102 General Applications Programming <sup>9</sup>   | 3     | С                  |                  | CR            |  |       |
|          | Foreign language <sup>5</sup> or Carolina Core Requirement <sup>4</sup>                            | 3     |                    |                  | CR/CC         |  |       |
|          | Humanities or Fine Arts  | 3     |                    |                  | CR            |  |       |
| meste    | er Six (15-17 Credit Hours)  |       |                    |                  |               |  |       |
|          | MSCI Elective (300-level and above)8   | 3-4   | С                  |                  | MR            |  |       |
|          | MSCI Elective (300-level and above) <sup>8</sup>   | 3-4   | С                  |                  | MR            |  |       |
|          | STAT 515 Statistical Methods I <sup>9</sup>  | 3     | C                  |                  | CR            | MATH 141; or both MATH 111 or  |       |
|          |  |       |                    |                  |               | higher and any statistics course   |       |
|          | Carolina Core Requirement <sup>4</sup>   | 3     |                    |                  | CC            |  |       |
|          | Social Science   | 3     |                    |                  | CR            |  |       |
| mme      | r (0-4 Credit Hours)   |       |                    |                  |               |  |       |
|          | MSCI 460 or other preapproved 3-week field exp. <sup>10</sup>                                      | 0-4   |                    |                  | MR            | MSCI 311, 313, & 314   |       |
| meste    | er Seven (15-17 Credit Hours)  |       |                    |                  |               |  |       |
|          | MSCI Elective (300-level and above)8   | 3-4   | С                  |                  | MR            |  |       |
|          | MSCI Elective (300-level and above) <sup>8</sup>   | 3-4   | С                  |                  | MR            |  |       |
|          | Carolina Core Requirement <sup>4</sup> or Approved Elective <sup>11</sup>                          | 3     |                    |                  | CC/PR         |  |       |
|          | Carolina Core Requirement <sup>4</sup> or Approved Elective <sup>11</sup>                          | 3     |                    |                  | CC/PR         |  |       |
|          | Approved Elective <sup>11</sup>  | 3     |                    |                  | PR            |  |       |
| meste    | er Eight (16-17 Credit Hours)  |       |                    |                  |               | ·  |       |
|          | MSCI 505 Senior Seminar  | 1     | С                  |                  | MR            |  |       |
|          | MSCI Elective (300-level and above) <sup>8</sup>   | 3-4   | C                  |                  | MR            |  |       |
|          | Approved Elective <sup>11</sup>  | 3     |                    |                  | PR            |  |       |
|          | Approved Elective <sup>11</sup>  | 3     |                    |                  | PR            |  |       |
|          | Approved Elective <sup>11</sup>  | 3     |                    |                  | PR            |  |       |
|          | Approved Elective <sup>11</sup>  | 3     | <b> </b>           | <b>.</b>         | PR            |  |       |

**Graduation Requirements Summary** 

| Minimum Total<br>Hours | Minimum Major<br>Requirements Hours | College & Program Requirements Hours | Carolina Core Hours | Minimum<br>Institutional GPA |
|------------------------|-------------------------------------|--------------------------------------|---------------------|------------------------------|
| 128                    | 36                                  | 46-58                                | 34-46               | 2.000                        |

- 1. Regardless of individual course grades, students must maintain a minimum 2.000 cumulative GPA.
- 2. Some colleges require a minimum GPA for major courses. Courses indicated in this column are included in the major GPA for this program of study.
- 3. Students who place into MATH 115 will be required to successfully complete it with a grade of C or better before taking MATH 141. MATH 115 can be used as an approved elective. Students who start with MATH 115 should use the following sequence for the first three semesters:

| Semester One                                | Semester Two                                 | Semester Three                               |
|---|--|--|
| ENGL 101                                    | ENGL 102                                     | MSCI 311                                     |
| MSCI 101                                    | MSCI 102                                     | MATH 142                                     |
| MATH 115                                    | MATH 141                                     | CHEM 112 & 112L                              |
| UNIV 101 or other Carolina Core Requirement | CHEM 111 & 111L                              | PHYS 201 & 201L or PHYS 211 & 211L           |
|   | Foreign Language or other Carolina Core Req. | Foreign language or other Carolina Core Req. |

- 4. The Carolina Core provides the common core of knowledge, skill and academic experience for all Carolina undergraduate students.
- 5. Students in the College of Arts and Sciences are required to demonstrate proficiency in one foreign language equivalent to the 122 course through course credit or the corresponding foreign language placement score.
- 6. The College of Arts and Sciences requires one U.S. History and one non-U.S. History course, both of which must be chosen from the approved Carolina Core GHS courses. Whichever is not fulfilled through the Carolina Core GHS requirement must be fulfilled through this college requirement.
- 7. PHYS 212 and 212 Lab may be used as a major elective, in which case one less MSCI Elective would be required.
- 8. In addition to the required 13 hours of major coursework, Marine Science majors must select 23 hours of Marine Science electives in consultation with a faculty advisor for a total of 36 major hours. The elective courses listed in the Undergraduate Studies Bulletin for Marine Science are commonly selected, but any course which is eligible for cognate credit in the College of Arts and Sciences can potentially be a major course in Marine Science. The determination of major courses in this interdisciplinary program is the result of consultation between the student and an advisor.
- 9. Students may choose to take MSCI 305 in place of CSCE 102 or MSCI 599 (Data Analysis section only) in place of STAT 515 by petition. If students use either MSCI 305 or 599 for the Carolina Core ARP requirement, then those hours cannot also be included in the 36 hours of major courses.
- 10. All MSCI majors are required to undertake a minimum of three weeks of marine science field effort. Possibilities include MSCI 460, semester or summer internship, REU, semester at sea, or faculty-sponsored field research or cruise. Students who do not select MSCI 460, must submit a petition for an alternative field experience to the Undergraduate Director. If the alternative is approved, the student must submit a short (2-3 page minimum) report at the completion of the experience to the Undergraduate Director for approval. Upon approval, the Undergraduate Director will notify the Dean's office of the substitution. Students will not normally receive course credit hours for their alternative field experience, but may combine this requirement with independent study credit as appropriate. If no course credit hours are associated with the field experience, the student will be required to take an additional Marine Science elective (300-level and above). Some students may complete MSCI 460 in the summer following senior year & graduate in August.
- 11. No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences.

## **Program Notes:**

- ENGL 101 and ENGL 102 must be completed in the student's first 60 semester hours of work in order for these courses to be credited toward graduation. MSCI 101 and MSCI 102 must be completed in the first year in order to stay on track with subsequent Marine Science courses and ensure a timely graduation. Other courses identified as "critical" must be completed before the beginning of the student's 5th major semester.
- Marine Science majors may enroll in the following courses a maximum of two times to earn the required grade of C or higher: MATH through MATH 142, CHEM 111/111L, CHEM 112/112/L, PHYS 201/201L or PHYS 211/211L, PHYS 202/202L or PHYS 212/212L. For the purposes of this standard of progression, withdrawal with a W does not constitute enrollment. These courses, in addition to MSCI 101 and MSCI 102, must be completed before the beginning of the student's their academic year (fifth major semester) as a marine science major.
- A maximum of 10 semester hours of a combination of independent study, MSCI 505, and undergraduate research courses may count in the 36 hours of major credit required for the Marine Science major.
- The last 30 credit hours toward your degree must be earned in residence at the University of South Carolina-Columbia.

University Requirements: Bachelor's degree-seeking students must meet Carolina Core (general education) requirements. For more information regarding these requirements, please visit the Carolina Core page on the University website.

| Codes:  |  |  |  |  |
|---|--|--|--|--|
| CC Carolina Core  | CC-INF Carolina Core – Information Literacy                      |  |  |  |
| CC-AIU Carolina Core-Aesthetic and Interpretive Understanding                             | CC-INT Carolina Core – Integrative Course                        |  |  |  |
| CC-ARP Carolina Core-Analytical Reasoning and Problem-Solving                             | CC-SCI Carolina Core – Scientific Literacy                       |  |  |  |
| CC-CMS Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component   | CC-VSR Carolina Core – Values, Ethics, and Social Responsibility |  |  |  |
| CC-CMW Effective, Engaged, and Persuasive Communication: Written Component                | CR College Requirement   |  |  |  |
| CC-GFL Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language | MR Major Requirement   |  |  |  |
| CC-GHS Carolina Core – Historical Thinking  | PR Program Requirement   |  |  |  |
| CC-GSS Carolina Core – Social Sciences  |  |  |  |  |

Disclaimer: Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.