

Major Map: Environmental Science Bachelor of Science (B.S.)

College of Arts and Sciences School of Earth, Ocean and Environment Bulletin Year: 2024-2025

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.

ne Progran	n Notes section for details regarding "critical courses" for this pa						
Critical			Min. Grade ¹		Code	Prerequisites	Notes
Semes	ter One (13-14 Credit Hours)						
!	ENGL 101 Critical Reading and Composition	3	С		CC-CMW		
	BIOL 101 & 101L – Biological Principles I	4			CC-SCI		
	or MSCI 101 The Ocean Environment						
	GEOL 101 Introduction to the Earth	3-4			PR		
	or GEOL 201 Observing the Earth (fall only)						
	or GEOG 201 Landform Geography						
	UNIV 101 The Student in the University	3			PR/CC		
	or Carolina Core Requirement ³						
Semes	ter Two (17 Credit Hours)						
	ENGL 102 Rhetoric and Composition	3	С		CC-CMW	C or better in ENGL 101	
	'				CC-INF		
	MATH 141 Calculus I⁴	4	С		CC-ARP	C or better in MATH 115 or	
						Math placement test score	
	BIOL 102 & 102L – Biological Principles II	4			CC-SCI	'	
	or MSCI 102 The Living Ocean						
	POLI 201 American National Government	3			CC-GSS/		
	CEI 2017 American National Covernment				VSR		
	Foreign language⁵ <i>or</i> other Carolina Core	3			CC-GFL		
	Requirement ³	3			00-01 L		
Somos	ter Three (18 Credit Hours)						
Semes	MATH 142 Calculus II	4	С		CC-ARP	C or better in MATH 141	
	ENVR 201 Environmental Science & Policy I (fall only)	4	С		PR/CC-	Sophomore Standing	
					INT	0 1 11 1 11 11 11 11	
	CHEM 111 & 111L – General Chemistry I	4			PR	C or better in MATH 115 or	
	or CHEM 141 Principles of Chemistry I					Math placement test score (CHEM 111	
						& Lab); C or better in MATH 141 or	
						Math placement test score (CHEM 141)	
	Carolina Core Requirement ³	3			CC		
	Foreign language⁵ <i>or</i> other Carolina Core	3			CC-GFL		
	Requirement ³						
	ter Four (17 Credit Hours)						
	ENVR 202 Envir. Science and Policy II (spring only)	4	С		PR/CC-		
					INT		
	CHEM 112 & 112L – General Chemistry II	4			PR	C or better in CHEM 111 and MATH	
	or CHEM 142 Principles of Chemistry II					111, 115 <i>or</i> higher math; Prereq or	
						Coreq: MATH 122, 141 or higher math	
						(CHEM 112 & Lab);	
						C or higher in CHEM 141 (CHEM 142)	
	ECON 221 Principles of Microeconomics	3			CR		
	or ECON 223 Introduction to Economics						
	or ECON 224 Introduction to Economics						
	History ⁶	3			CR		
	Foreign language ⁵ or Carolina Core Requirement ³	3			CR/CC		
Semes	ter Five (17-18 Credit Hours)						
	BIOL 301 & 301L Ecology & Evolution	4	С		MR	BIOL 102/MSCI 102 or MSCI 311	
	ENVR 548 Environmental Economics	3	1		PR	ECON 221 & 222 or ECON 224 (ENVR	
		. –		1		,	
1						548)	
	or POLI 477 Green Politics					548)	
	or POLI 477 Green Politics or POLI 478 Environmental Policy	4			PR	,	
	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I	4			PR	C or better in MATH 111/111i/112/	
	or POLI 477 Green Politics or POLI 478 Environmental Policy	4			PR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201);	
	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I		C			C or better in MATH 111/111i/112/	
	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸	3-4	С		MR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201);	
Compo	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷		С			C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201);	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours)	3-4 3			MR CC/PR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201);	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸	3-4 3 3-4	С		MR CC/PR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201);	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ Environmental Science Major Course ⁸	3-4 3 3-4 3-4	C		MR CC/PR MR MR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (<i>PHYS 201</i>); MATH 141 (<i>PHYS 211</i>)	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ CSCE 102 General Applications Programming	3-4 3 3-4	С		MR CC/PR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201);	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ CSCE 102 General Applications Programming or higher-level CSCE course	3-4 3 3-4 3-4	C		MR CC/PR MR MR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (<i>PHYS 201</i>); MATH 141 (<i>PHYS 211</i>)	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ Environmental Science Major Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis	3-4 3 3-4 3-4	C		MR CC/PR MR MR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (<i>PHYS 201</i>); MATH 141 (<i>PHYS 211</i>)	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ CSCE 102 General Applications Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis or MSCI 509 MATLAB-Based Data Analysis in Ocean	3-4 3 3-4 3-4	C		MR CC/PR MR MR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (<i>PHYS 201</i>); MATH 141 (<i>PHYS 211</i>)	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ CSCE 102 General Applications Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis or MSCI 509 MATLAB-Based Data Analysis in Ocean Sceicnes	3-4 3 3-4 3-4 3	C C C		MR CC/PR MR MR CR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201); MATH 141 (PHYS 211) See Bulletin listing	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ CSCE 102 General Applications Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis or MSCI 509 MATLAB-Based Data Analysis in Ocean	3-4 3 3-4 3-4	C		MR CC/PR MR MR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (<i>PHYS 201</i>); MATH 141 (<i>PHYS 211</i>)	
Semes	or POLI 477 Green Politics or POLI 478 Environmental Policy PHYS 201 & 201L – General Physics I or PHYS 211 & 211L – Essentials of Physics I Environmental Science Major Course ⁸ Carolina Core Requirement ³ or Approved Elective ⁷ ter Six (15-17 Credit Hours) Environmental Science Major Course ⁸ Environmental Science Major Course ⁸ CSCE 102 General Applications Programming or higher-level CSCE course or MSCI 305 Ocean Data Analysis or MSCI 509 MATLAB-Based Data Analysis in Ocean Sceicnes	3-4 3 3-4 3-4 3	C C C		MR CC/PR MR MR CR	C or better in MATH 111/111i/112/ 115/116/122/141 or higher (PHYS 201); MATH 141 (PHYS 211) See Bulletin listing	

Semester Seven (15-18 Credit Hours)				
Environmental Science Major Course8	3-4	С	MR	
Environmental Science Major Course8	3-4	С	MR	
Environmental Science Major Course8	3-4	С	MR	
Ethics Course: ENVR 322 or PHIL 312, 320-325, 360,	3		CR	
514, <i>or</i> 550				
Approved Elective ⁷	3		PR	
Semester Eight (12-17 Credit Hours)				
ENVR 480 Environmental Issues Seminar	3	С	MR	
Environmental Science Major Course8	3-4	С	MR	
Environmental Science Major Course8	3-4	С	MR	
Approved Elective ⁷	3		PR	
Approved Elective ⁷ (only if needed to meet hours to graduate)	3		PR	

Graduation Requirements Summary

Minimum Total Hours	Minimum Major Requirements Hours	College & Program Requirements Hours	Carolina Core Hours	Minimum Institutional GPA
128	34	50-62	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. The Carolina Core provides the common core of knowledge, skill and academic experience for all Carolina undergraduate students.
- 4. Students who place into MATH 115 will be required to successfully complete the corresponding prerequisite before taking MATH 141. MATH 115 may be used as an approved elective. Students who start with MATH 115 should take History in semester one & use the following sequence for semesters 2-4:

Semester Two	Semester Three	Semester Four
ENGL 102	MATH 141	MATH 142
BIOL 102 & 102L or MSCI 102	CHEM 111 & 111L	ENVR 202
MATH 115	ENVR 201	CHEM 112 & 112L
POLI 201	Carolina Core Requirement	ECON 221 or 223 or 224
Foreign Language or other Carolina Core Req.	Foreign language or Carolina Core Req.	Foreign Language or other Carolina Core Req.

- 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. 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.
- 8. Environmental Science Major Courses (27-29 hours)

a.

Select 3 of 4 (10-11 hours):	
GEOL 315 – Surface & Near Surface Processes (4) (spring only)	ECIV 350 – Intro. to Environmental Engineering (3)
GEOG 202 – Weather & Climate (4)	ENHS 660 – Concepts of Environmental Health Science (3)

b. Selected Courses with Advisor Approval (17-18 hours): Students, in consultation with their advisor, will develop a program of study which either provides a broad set of environmental science courses or allows students to focus in a defined area. Given the current course offerings and faculty at the University, if a student wanted to focus their elective course work, possible areas include: Natural Systems, Climate and Weather, Water Resources, Energy, or Humans and the Environment. All students' elective courses should include at least 6 hours taken at the 400 level or above. All courses may be selected from ENVR designator classes, but if not ENVR classes, then no more than 3 should be from a single discipline and no more than one Research Methods course. For a list of acceptable major course electives, please visit the Bulletin.

Program Notes:

- Courses identified as "critical" must be completed in the student's first 60 semester hours of work in order for these courses to be credited toward graduation.
- All undergraduate students must take a 3-credit course or its equivalent with a passing grade that covers the founding documents. This course may
 fulfill any requirement in the program of study. Courses that meet this requirement are listed in the academic bulletin.
- Environmental Science majors may enroll in a major course a maximum of twice to earn the required grade of C or higher. For the purposes of progression, withdrawal with a W does not constitute enrollment.
- 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.

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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.