

B.A. BIOLOGICAL SCIENCES & B.A. SCIENCE TEACHING: BIOLOGICAL SCIENCES 2022-2023

FRESHMAN YEAR

<u>First Semester</u>	<u>Second Semester</u>
BIOL 1030 General Biology I and 3(3,0)	BIOL 1040 General Biology II and 3(3,0)
BIOL 1050 General Biology Laboratory I or 1(0,3)	BIOL 1060 General Biology Laboratory II or 1(0,3)
BIOL 1100 Principles of Biology I 4(3,3)	BIOL 1110 Principles of Biology II 4(3,3)
CH 1010 General Chemistry 4(3,3)	CH 1020 General Chemistry 4(3,3)
ENGL 1030 Composition and Rhetoric 3(3,0)	ED 1050 Orientation to Education 2(2,0)
MATH 1060 Calculus of One Variable I 4(4,0)	Modern Language Requirement ¹ 3(3,0)
Modern Language Requirement ¹ <u>3(3,0)</u>	Statistics Requirement ² <u>3(3,0)</u>
18	16

SOPHOMORE YEAR

CH 2010 Survey of Organic Chemistry 3(3,0)	ED 3010 Principles of American Education 3(3,0)
CH 2020 Survey of Organic Chem. Lab 1(0,3)	EDF 3020 Educational Psychology 3(3,0)
HIST 1010 History of the United States to 1877 3(3,0)	PHYS 2080 General Physics II 3(3,0)
PHYS 2070 General Physics I 3(3,0)	PHYS 2100 General Physics II Lab. 1(0,2)
PHYS 2090 General Physics I Lab. 1(0,2)	Biochemistry or Genetics Requirement ⁴ 3
Arts and Humanities (Literature) Requirement ³ 3	Organismal Diversity Requirement ⁵ <u>4</u>
Biochemistry or Genetics Requirement ⁴ <u>3</u>	17
17	

JUNIOR YEAR

ANTH 2010 Introduction to Anthropology 3(3,0)	BIOL 3350 Evolutionary Biology 3(3,0)
BIOL 4610 Cell Biology 3(3,0)	BIOL (EDSC) 4820 Laboratory Tech. for Teaching Sci. 3(1,6)
EDLT 4800 Foundations of Adolescent Literacy 3(3,0)	EDF 3350 Adolescent Growth & Development 3(3,0)
EDSC 3270 Practicum in Secondary Science 3(3,0)	Functional Biology Requirement ⁷ 3
Ecology Requirement ⁶ 3	Global Challenges Course Requirement ³ <u>3</u>
Global Challenges Course Requirement ³ <u>3</u>	15
18	

SENIOR YEAR

COMM 1500 Intro to Human Communication or	EDSC 4470 Teaching Intern. in Sec. Sci. ⁹ 9(0,27)
COMM 2500 Public Speaking 3(3,0)	EDSC 4570 Sec. Science Capstone Sem. ⁹ <u>3(2,3)</u>
EDSP 3700 Introduction to Special Education 3(3,0)	12
EDSC 4270 Teaching Secondary Science ⁸ 3(2,2)	
EDLT 4980 Secondary Content Area Reading ⁸ 3(2,2)	
Arts and Humanities (Non-Lit.) Requirement ³ <u>3</u>	
15	

Total Semester Hours = 128

¹ Students must complete through 2020 in a modern language. See Modern Languages Requirement at Clemson University statement in Academic Regulations.

² STAT 2300 or STAT 3090

³ See General Education Requirements

⁴ One lecture course must be completed for both biochemistry (BCHM 3010 or BCHM 3050) and for genetics (GEN 3000 or GEN 3020).

⁵ One lecture and associated laboratory must be selected from BIOL 3010; BIOL 3020/3060; BIOL 3030/3070; BIOL 3040/3080; BIOL 3200; BIOL 4060/4070; or BIOL 4250/4260.

⁶ At least one selected from BIOL 4410, BIOL 4420, BIOL 4430, BIOL 4460, or BIOL 4700.

⁷ At least one selected from BIOL 3160, BIOL 4040, BIOL 4080, BIOL 4590, BIOL 4750, or BIOL 4800.

⁸ To be taken the semester prior to EDSC 4470 and 4570. EDSC 4270 and EDLT 4980 must be taken concurrently.

⁹ Students completing the coursework for the Teacher Certification Emphasis Area must complete the above coursework and meet all requirements for enrollment in professional courses, apply for directed teaching/teaching internship, and meet all requirements for recommendation for initial licensure as stated in the Undergraduate Catalog under Teacher Education Programs. The following courses must be taken the spring semester of the senior year: EDSC 4470 and EDSC 4570.

2022/2023 B.A. BIOLOGICAL SCIENCES & SCIENCE TEACHING: BIOLOGICAL SCIENCES

		SEM/Yr	_Grade		
BIOL Core Requirement: (29 cr.)					
BIOL 1030/1050 OR	3(3,0) & 1(0,3)	_____	_____	¹ CH 2230, 2270 and 2240, 2280 may be substituted for CH 2010. Most medical, dental, and veterinary medicine schools require two semesters of organic chemistry with laboratory, CH 2230/2270 and 2240/2280.	
BIOL 1100/1101	4(3,3)	_____	_____		
BIOL 1040/1060 OR	3(3,0) & 1(0,3)	_____	_____		
BIOL 1110/1111	4(3,3)	_____	_____		
BIOL 3350	3(3,0)	_____	_____		
BIOL 4610	3(3,0)	_____	_____		
BIOL (EDSC) 4820	3(1,6)	_____	_____		
<i>Organismal Diversity Requirement (4 cr.)</i>					² Students may choose to take physics with calculus, PHYS 1220, 1240 (MATH 1060 pre-req) & PHYS 2210, 2230 (MATH 1080 pre-req).
BIOL 3010/3011, 3020/3060, 3030/3070, 3040/3080, 3200/3201, 4060/4070 OR 4250/4260		_____	_____		
<i>Ecology (3 cr.)</i>					³ SC REACH Act
BIOL 4410, 4420, 4430, 4460, OR 4700		_____	_____	⁴ Two semesters (through 2020) in any modern language. See Modern Languages Requirement at Clemson University statement in Academic Regulations.	
<i>Functional Biology Requirement (3 cr.)</i>					
BIOL 3160, 4040, 4080, 4590, 4750, OR 4800		_____	_____	⁵ See General Education Requirements. ⁶ To be taken the semester prior to EDSC 4470 and 4570. EDSC 4270 and EDLT 4980 must be taken concurrently. ⁷ EDSC 4470 and EDSC 4570 must be taken concurrently. Students completing the coursework for the Teacher Certification Emphasis Area must complete the above coursework and meet all requirements for enrollment in professional courses, apply for directed teaching/teaching internship, and meet all requirements for recommendation for initial licensure as stated in the Undergraduate Catalog under Teacher Education Programs. Must be taken the spring semester of the senior year.	
Required Science Courses (33 cr.)					
BCHM 3050	3(3,0)	_____	_____		
CH 1010/1011	4(3,3)	_____	_____		
CH 1020/1021	4(3,3)	_____	_____		
CH 2010, 2020	3(3,0) & 1(0,3) ¹	_____	_____		
GEN 3000	3(3,0)	_____	_____		
MATH 1060	4(4,0)	_____	_____		
STAT 2300 OR 3090	3(3,0)	_____	_____		
PHYS 2070, 2090	3(3,0) & 1(0,2) ²	_____	_____		
PHYS 2080, 2100	3(3,0) & 1(0,2) ²	_____	_____		
Req. Non-Science Courses (27 cr.)					
ANTH 2010	3(3,0)	_____	_____		
ENGL 1030/1031	3(3,1)	_____	_____		
HIST 1010	3(3,0) ³	_____	_____		
(Modern Language)	4(3,1) ⁴	_____	_____		
(Modern Language)	4(3,1) ⁴	_____	_____		
Modern Language	3(3,0) ⁴	_____	_____		
Modern Language	3(3,0) ⁴	_____	_____		
Arts & Humanities – Literature	3(3,0) ⁵	_____	_____		
Arts & Humanities – Non-Literature	3(3,0) ⁵	_____	_____		
Oral Communication Requirement	3(3,0) ⁵	_____	_____		
Education Courses (38 cr.)					
ED 1050	2(2,0)	_____	_____		
ED 3010	3(3,0)	_____	_____		
EDF 3020	3(3,0)	_____	_____		
EDF 3350	3(3,0)	_____	_____		
EDLT 4800	3(3,0)	_____	_____		
EDLT 4980	3(2,2) ⁶	_____	_____		
EDSC 3270	3(3,0)	_____	_____		
EDSC 4270	3(2,2) ⁶	_____	_____		
EDSC 4470	9(0,27) ⁷	_____	_____		
EDSC 4570	3(2,3) ⁷	_____	_____		
EDSP 3700	3(3,0)	_____	_____		

Other Courses	SEM/Yr	Grade
CU1000	_____	_____
GCC	_____	_____
GCC	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____