

# Biochemistry/Chemistry Emphasis

## 2021 Fall Catalog and Beyond B.S. Sample Program Plans

Since the Biochemistry major is rigorous and highly sequential, summer session options are included to promote timely progress to degree while maintaining a manageable course load.

### Math Placement is Intermediate Algebra (ARC 35)

	Fall	Winter	Spring	Summer
<u>Year One</u>	Intermediate Algebra 35 <sup>(0)</sup>	Math 6A <sup>(4)</sup>	Math 6B <sup>(4)</sup>	Chemistry 1A, 1LA <sup>(5)</sup>
	English 1A <sup>(4)</sup>	English 1B <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Chemistry 1B, 1LB <sup>(5)</sup>
	Biochemistry 95 <sup>(1)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
	Breadth or Elective <sup>(4)</sup>			
<u>Year Two</u>	Chemistry 1C, 1LC <sup>(5)</sup>	Chemistry 8A/8LA <sup>(4)</sup>	Chemistry 8B/8LB <sup>(4)</sup>	Chemistry 8C/8LC <sup>(4)</sup>
	Biology 5A, 5LA <sup>(5)</sup>	Biology 5B <sup>(4)</sup>	Biology 5C <sup>(4)</sup>	*Biochemistry 100 <sup>(Optional)</sup> <sup>(4)</sup>
	Math 7A <sup>(4)</sup>	Math 7B <sup>(4)</sup>	Math 46 <sup>(4)</sup>	
<u>Year Three</u>	Biochemistry 110A <sup>(4)</sup>	Biochemistry 110B <sup>(4)</sup>	Biochemistry 110C <sup>(4)</sup>	Physics 2B, 2LB <sup>(5)</sup>
	Biology 102 <sup>(4)</sup>	Chemistry 5 <sup>(5)</sup>	UD Biochemistry Elective <sup>(4)</sup>	Physics 2C, 2LC <sup>(5)</sup>
	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Physics 2A, 2LA <sup>(5)</sup>	
<u>Year Four</u>	Chemistry 109 <sup>(4)</sup>	Biochemistry 184 <sup>(4)</sup>	UD Chemistry Elective <sup>(4)</sup>	
	English 1C or 1SC <sup>(4)</sup>	Biochemistry 162 <sup>(5)</sup>	Statistics 10 <sup>(5)</sup>	
	UD Chemistry Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	<b>Minimum units 180</b>

### Math Placement is MATH 5

	Fall	Winter	Spring	Summer
<u>Year One</u>	Math 5 <sup>(4)</sup>	Math 7A <sup>(4)</sup>	Math 7B <sup>(4)</sup>	Math 46 <sup>(4)</sup>
	English 1A <sup>(4)</sup>	English 1B <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
	Biochemistry 95 <sup>(1)</sup>	Chemistry 1A, 1LA <sup>(5)</sup>	Chemistry 1B, 1LB <sup>(5)</sup>	Chemistry 1C, 1LC <sup>(5)</sup>
	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
<u>Year Two</u>	Chemistry 8A/8LA <sup>(4)</sup>	Chemistry 8B/8LB <sup>(4)</sup>	Chemistry 8C/8LC <sup>(4)</sup>	
	Biology 5A, 5LA <sup>(5)</sup>	Biology 5B <sup>(4)</sup>	Biology 5C <sup>(4)</sup>	
	Physics 2A, 2LA <sup>(5)</sup>	Physics 2B, 2LB <sup>(5)</sup>	Physics 2C, 2LC <sup>(5)</sup>	
<u>Year Three</u>	Biochemistry 110A <sup>(4)</sup>	Biochemistry 110B <sup>(4)</sup>	Biochemistry 110C <sup>(4)</sup>	
	Biology 102 <sup>(4)</sup>	Chemistry 5 <sup>(5)</sup>	UD Biochemistry Elective <sup>(4)</sup>	
	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
<u>Year Four</u>	Chemistry 109 <sup>(4)</sup>	Biochemistry 184 <sup>(4)</sup>	UD Chemistry Elective <sup>(4)</sup>	
	English 1C or 1SC <sup>(4)</sup>	Biochemistry 162 <sup>(5)</sup>	Statistics 10 <sup>(5)</sup>	
	UD Chemistry Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	<b>Minimum units 180</b>

### Math Placement is MATH 6A

	Fall	Winter	Spring	Summer
<u>Year One</u>	Math 6A <sub>(4)</sub>	Math 6B <sub>(4)</sub>	Math 7A <sub>(4)</sub>	
	English 1A <sub>(4)</sub>	English 1B <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Chemistry 1W <sub>(3)</sub>	Chemistry 1A, 1LA <sub>(5)</sub>	Chemistry 1B, 1LB <sub>(5)</sub>	Chemistry 1C, 1LC <sub>(5)</sub>
	Biochemistry 95 <sub>(1)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
<u>Year Two</u>	Chemistry 8A/8LA <sub>(4)</sub>	Chemistry 8B/8LB <sub>(4)</sub>	Chemistry 8C/8LC <sub>(4)</sub>	*Biochemistry 100 <small>(Optional) (4)</small>
	Biology 5A, 5LA <sub>(5)</sub>	Biology 5B <sub>(4)</sub>	Biology 5C <sub>(4)</sub>	
	Physics 2A, 2LA <sub>(5)</sub>	Physics 2B, 2LB <sub>(5)</sub>	Physics 2C, 2LC <sub>(5)</sub>	
	Math 7B <sub>(4)</sub>	Biochemistry 15 <sub>(3)</sub>	Math 46 <sub>(4)</sub>	
<u>Year Three</u>	Biochemistry 110A <sub>(4)</sub>	Biochemistry 110B <sub>(4)</sub>	Biochemistry 110C <sub>(4)</sub>	
	Biology 102 <sub>(4)</sub>	Chemistry 5 <sub>(5)</sub>	UD Biochemistry Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
<u>Year Four</u>	Chemistry 109 <sub>(4)</sub>	Biochemistry 184 <sub>(4)</sub>	UD Chemistry Elective <sub>(4)</sub>	
	English 1C or 1SC <sub>(4)</sub>	Biochemistry 162 <sub>(5)</sub>	Statistics 10 <sub>(5)</sub>	
	UD Chemistry Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
				<b>Minimum units 180</b>

### Math Placement is MATH 7A

	Fall	Winter	Spring	Summer
<u>Year One</u>	Math 7A <sub>(4)</sub>	Math 7B <sub>(4)</sub>	Math 46 <sub>(4)</sub>	
	English 1A <sub>(4)</sub>	English 1B <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Chemistry 1A, 1LA <sub>(5)</sub>	Chemistry 1B, 1LB <sub>(5)</sub>	Chemistry 1C, 1LC <sub>(5)</sub>	
	Biochemistry 95 <sub>(1)</sub>	Biology 5A, 5LA <sub>(5)</sub>	Biology 5B <sub>(4)</sub>	
<u>Year Two</u>	Chemistry 8A/8LA <sub>(4)</sub>	Chemistry 8B/8LB <sub>(4)</sub>	Chemistry 8C/8LC <sub>(4)</sub>	
	Biology 5C <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Physics 2A, 2LA <sub>(5)</sub>	Physics 2B, 2LB <sub>(5)</sub>	Physics 2C, 2LC <sub>(5)</sub>	
		Biochemistry 15 <sub>(3)</sub>	*Biochemistry 100 <small>(Optional) (4)</small>	
<u>Year Three</u>	Biochemistry 110A <sub>(4)</sub>	Biochemistry 110B <sub>(4)</sub>	Biochemistry 110C <sub>(4)</sub>	
	Biology 102 <sub>(4)</sub>	Chemistry 5 <sub>(5)</sub>	UD Biochemistry Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>		Breadth or Elective <sub>(4)</sub>	
<u>Year Four</u>	Chemistry 109 <sub>(4)</sub>	Biochemistry 184 <sub>(4)</sub>	UD Chemistry Elective <sub>(4)</sub>	
	English 1C or 1SC <sub>(4)</sub>	Biochemistry 162 <sub>(5)</sub>	Statistics 10 <sub>(5)</sub>	
	UD Chemistry Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>			<b>Minimum units 180</b>

**Math Placement is MATH 7B**

	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
<b>Year One</b>	Math 7B <sub>(4)</sub>	Math 46 <sub>(4)</sub>		
	English 1A <sub>(4)</sub>	English 1B <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Chemistry 1A, 1LA <sub>(5)</sub>	Chemistry 1B, 1LB <sub>(5)</sub>	Chemistry 1C, 1LC <sub>(5)</sub>	
	Biochemistry 95 <sub>(1)</sub>	Biology 5A, 5LA <sub>(5)</sub>	Biology 5B <sub>(4)</sub>	
<b>Year Two</b>	Chemistry 8A/8LA <sub>(4)</sub>	Chemistry 8B/8LB <sub>(4)</sub>	Chemistry 8C/8LC <sub>(4)</sub>	
	Biology 5C <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Physics 2A, 2LA <sub>(5)</sub>	Physics 2B, 2LB <sub>(5)</sub>	Physics 2C, 2LC <sub>(5)</sub>	
		Biochemistry 15 <sub>(3)</sub>	*Biochemistry 100 <small>(Optional)</small> <sub>(4)</sub>	
<b>Year Three</b>	Biochemistry 110A <sub>(4)</sub>	Biochemistry 110B <sub>(4)</sub>	Biochemistry 110C <sub>(4)</sub>	
	Biology 102 <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	UD Biochemistry Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>	Chemistry 5 <sub>(5)</sub>	Breadth or Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>		Breadth or Elective <sub>(4)</sub>	
<b>Year Four</b>	Chemistry 109 <sub>(4)</sub>	Biochemistry 184 <sub>(4)</sub>	UD Chemistry Elective <sub>(4)</sub>	
	English 1C or 1SC <sub>(4)</sub>	Biochemistry 162 <sub>(5)</sub>	Statistics 10 <sub>(5)</sub>	
	UD Chemistry Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	
	Breadth or Elective <sub>(4)</sub>		Breadth or Elective <sub>(4)</sub>	<b>Minimum units 180</b>

**\*NOTE\***

**BCH 100 ENROLLMENT:** Students who earn a grade lower than “B-“in BIOL 5A or CHEM 08A are strongly encouraged to complete BCH 100 during their second year of residence to better prepare themselves for BCH 110A, BCH 110B, and BCH 110C.

**MATH-**Please ensure that you follow the math pathway provided and work your way through the MATH 7 series.

**STAT 100A-**Acceptable if taken prior to Fall 2021.

