

# Biochemistry/Biology Emphasis

## 2021 Fall Catalog and Beyond B.A. 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
Year One	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>			
Year Two	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>	
		Biochemistry 15 <sup>(3)</sup>	Breadth or Elective <sup>(4)</sup>	
Year Three	Biochemistry 110A <sup>(4)</sup>	Biochemistry 110B <sup>(4)</sup>	Biochemistry 110C <sup>(4)</sup>	Statistics 10 <sup>(5)</sup>
	Biology 102 <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
	Physics 2A, 2LA <sup>(5)</sup>	Physics 2B, 2LB <sup>(5)</sup>	Physics 2C, 2LC <sup>(5)</sup>	
	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
Year Four	Chemistry 109 <sup>(4)</sup>	Biochemistry 184 <sup>(4)</sup>	UD Biology Elective <sup>(4)</sup>	
	English 1C or 1SC <sup>(4)</sup>	Biochemistry 162 <sup>(5)</sup>	UD Biochemistry Elective <sup>(4)</sup>	
	UD Biology Elective <sup>(4)</sup>	Breadth or 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
Year One	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>	Biology 5A, 5LA <sup>(5)</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>	
Year Two	Chemistry 8A/8LA <sup>(4)</sup>	Chemistry 8B/8LB <sup>(4)</sup>	Chemistry 8C/8LC <sup>(4)</sup>	
	Biology 5B <sup>(4)</sup>	Biology 5C <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
	Physics 2A, 2LA <sup>(5)</sup>	Physics 2B, 2LB <sup>(5)</sup>	Physics 2C, 2LC <sup>(5)</sup>	
		Biochemistry 15 <sup>(3)</sup>	*Biochemistry 100 <sup>(Optional)</sup> <sup>(4)</sup>	
Year Three	Biochemistry 110A <sup>(4)</sup>	Biochemistry 110B <sup>(4)</sup>	Biochemistry 110C <sup>(4)</sup>	
	Biology 102 <sup>(4)</sup>	Statistics 10 <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>	
	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	Breadth or Elective <sup>(4)</sup>	
Year Four	Chemistry 109 <sup>(4)</sup>	Biochemistry 184 <sup>(4)</sup>	UD Biology Elective <sup>(4)</sup>	
	English 1C or 1SC <sup>(4)</sup>	Biochemistry 162 <sup>(5)</sup>	Breadth or Elective <sup>(4)</sup>	
	UD Biology Elective <sup>(4)</sup>	Breadth or 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**

	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
<u>Year One</u>	Math 6A <sub>(4)</sub>	Math 6B <sub>(4)</sub>	Math 7A <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>
	English 1A <sub>(4)</sub>	English 1B <sub>(4)</sub>	Biology 5A, 5LA <sub>(5)</sub>	
	CHEM 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>	Breadth or Elective <sub>(4)</sub>
	Biology 5B <sub>(4)</sub>	Biology 5C <sub>(4)</sub>	Breadth or Elective <sub>(4)</sub>	*Biochemistry 100 <small>(Optional)</small> <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>	Statistics 10 <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>	Breadth or Elective <sub>(4)</sub>	
<u>Year Four</u>	Chemistry 109 <sub>(4)</sub>	Biochemistry 184 <sub>(4)</sub>	UD Biology Elective <sub>(4)</sub>	
	English 1C or 1SC <sub>(4)</sub>	Biochemistry 162 <sub>(5)</sub>	Breadth or Elective <sub>(4)</sub>	
	UD Biology 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**

	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
<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>	
	BCH 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>	
	Breadth or Elective <sub>(4)</sub>	Biochemistry 15 <sub>(3)</sub>	*Biochemistry 100 <small>(Optional)</small> <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>	Statistics 10 <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>	Breadth or Elective <sub>(4)</sub>	
<u>Year Four</u>	Chemistry 109 <sub>(4)</sub>	Biochemistry 184 <sub>(4)</sub>	UD Biology Elective <sub>(4)</sub>	
	English 1C or 1SC <sub>(4)</sub>	Biochemistry 162 <sub>(5)</sub>	Breadth or Elective <sub>(4)</sub>	
	UD Biology 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**

Year One

<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
Math 7B <sub>(4)</sub>	Math 46 <sub>(4)</sub>	Breadth or Elective <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>	
BCH 95 <sub>(1)</sub>	Biology 5A, 5LA <sub>(5)</sub>	Biology 5B <sub>(4)</sub>	

Year Two

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>	
Breadth or Elective <sub>(4)</sub>	Biochemistry 15 <sub>(3)</sub>	*Biochemistry 100 <small>(Optional)</small> <sub>(4)</sub>	

Year Three

Biochemistry 110A <sub>(4)</sub>	Biochemistry 110B <sub>(4)</sub>	Biochemistry 110C <sub>(4)</sub>	
Biology 102 <sub>(4)</sub>	STAT 10 <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>	Breadth or Elective <sub>(4)</sub>	

Year Four

Chemistry 109 <sub>(4)</sub>	Biochemistry 184 <sub>(4)</sub>	UD Biology Elective <sub>(4)</sub>	
English 1C or 1SC <sub>(4)</sub>	Biochemistry 162 <sub>(5)</sub>	Breadth or Elective <sub>(4)</sub>	
UD Biology 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 8/48-**Please consult with your advisor if you credit was earned from high school or community college

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