

## **Bachelor of Science in Biochemistry and Molecular Biology**

2019-2020 Degree Completion Plan

**Important:** This degree plan is effective for those starting this degree program in fall 2019 through summer 2020. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations, or cognates.

# GENERAL EDUCATION/

Course	IONAL SKILLS REQUIREMENTS	<u>Hrs</u>	Sem	Grade	Course		Hrs	Sem	Grade
Communica	tion & Information Literacy (13 hou	rs) <sup>1</sup>			Major Found	lational Courses (19-27 hours)			
ENGL 101	Composition & Rhetoric	3			BIOL 224	General Biology I <sup>4,5</sup>	4		
INQR 101	Inquiry 101	1			CHEM	4,5,6	4		
	Communications Elective	3			CHEM	4,5,7	4		
	Information Literacy Elective	3			MATH 126	Elementary Calculus for Business & Sci <sup>4,5</sup>			
	Information Literacy Elective	3			<u>or</u> MATH 131	Calculus & Analytic Geometry I <sup>4,5</sup>	3-4		
					MATH 201	Introduction to Probability & Statistics <sup>4,5</sup>			
Technological Solutions & Quantitative Reasoning (4-7 hours) <sup>1</sup>					or MATH 211	Introduction to Statistical Analysis <sup>4,5</sup>	3		
UNIV 101	University Core Competencies	1			PHYS 201	General Physics I <sup>4,5</sup>			
MATH	Math Elective (MATH 114 or higher)	3			or PHYS 231	University Physics I <sup>4,5</sup>	4		
	Technology Competency <sup>2</sup>	0-3			PHYS 202	General Physics II <sup>4,5</sup>			
					or PHYS 232	University Physics II <sup>4,5</sup>	4		
Critical Thi	nking (8 hours) <sup>1</sup>								
RLGN 105	Intr Bwvw/Contemp Moral Issues <sup>3</sup>	2			<b>MAJOR</b>				
RSCH 201	Research 201	3				Core (55 hours)			
	Critical Thinking Elective	3			BCHM 451	Biochemistry I	4		
					BCHM 452	Biochemistry II	4		
Civic & Global Engagement (5 hours) <sup>1</sup>				BIOL 225	General Biology II				
EVAN 101	Evangelism & Christian Life <sup>3</sup>	2			or BIOL 317	Botany	4		
	Cultural Studies Elective	3			BIOL 301	Genetics	4		
					BIOL 303	Microbiology	4		
Social & Scientific Inquiry (6 hours) <sup>1</sup>			BIOL 400	Biology Seminar	1				
	Natural Science Elective	3			BIOL 415	Cell Biology	4		
	Social Science Elective	3			BIOL 455	Molecular Techniques	3		
					CHEM 301	Organic Chemistry I	4		
Christianity	& Contexts (8 hours) <sup>1</sup>				CHEM 302	Organic Chemistry II	4		
BIBL 105	Old Testament Survey	2			CHEM 321	Analytical Chemistry	4		
BIBL 110	New Testament Survey	2			CHEM 461	Physical Chemistry I	3		
THEO 201	Theology Survey I <sup>3</sup>	2			CHEM 462	Physical Chemistry II	3		
THEO 202	Theology Survey II <sup>3</sup>	2			CHEM 465	Physical Chemistry I Lab	1		
					CHEM 466	Physical Chemistry II Lab	1		
					CRST 290	History of Life			-
					or CRST 390	Origins	3		
					MATH 132	Calculus & Analytic Geometry II	4		

### **Graduation Requirements**

120 Total Hours

2.0 Overall grade point average

**30** Hours must be upper-level courses (300-400 level)

**Grade of 'C'** Minimum required for all upper-level courses in the major

50% Of major taken through Liberty University

30 Hours must be completed through Liberty University

**Grad App** Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date

CSER All requirements must be satisfied before a degree will be awarded

#### Notes

All applicable prerequisites must be met

FREE ELECTIVES (0-2 hours)

<sup>1</sup>Refer to the list of approved general education electives at <a href="www.liberty.edu/gened">www.liberty.edu/gened</a> before enrolling in foundational skill requirements

<sup>2</sup>All students must pass the Computer Assessment OR complete applicable INFT course; refer to <a href="www.liberty.edu/computerassessment">www.liberty.edu/computerassessment</a> for more information

<sup>3</sup>Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 and EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 and THEO 202 waived

<sup>4</sup>MATH 131, 211, PHYS 231 and 232 are strongly recommended

<sup>5</sup>Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at <a href="https://www.liberty.edu/gened">www.liberty.edu/gened</a>

<sup>6</sup>Choose CHEM 121 <u>OR</u> CHEM 131 and 135

<sup>7</sup>Choose CHEM 122 <u>OR</u> CHEM 132 and 136

Suggested Course Sequence on second page

Revised: 03.15.2019 Effective: Catalog Term 2019-40

## SUGGESTED COURSE SEQUENCE

### FRESHMAN YEAR

First Semester ENGL 101	3	Second Semester RLGN 105		2									
INQR 101	1	CHEM Elective(s) <sup>4</sup>		4									
UNIV 101	1	Information Literacy Elective <sup>1</sup>		3									
Natural Science Elective <sup>1</sup> [BIOL 224]	4	BIOL 225 <u>or</u> 317		4									
CHEM Elective(s) <sup>2</sup>	4	MATH 132		4									
MATH 126 <u>or</u> 131 <sup>3</sup>	3-4	CSER		<u>0</u>									
CSER	<u>0</u>		Total	17									
Total	16-17												
SOPHOMORE YEAR													
EVAN 101	2	Communications Elective <sup>1</sup>		3									
RSCH 201	3	Critical Thinking Elective <sup>1</sup>		3									
MATH Elective <sup>1</sup> [MATH 201 or 211 <sup>3</sup> ]	3	Technology Competency <sup>5</sup>		0-3									
BIOL 301	4	BIOL 415		4									
CHEM 301	4	CHEM 302		4									
CSER	<u>0</u>	CSER		0									
Total	16		Total	14-17									
	JUNIOR Y	EAR											
Information Literacy Elective <sup>1</sup>	3	THEO 201		2									
PHYS 201 <u>or</u> 231 <sup>3</sup>	4	PHYS 202 <u>or</u> 232 <sup>3</sup>		4									
BCHM 451	4	BCHM 452		4									
CHEM 321	4	BIOL 400		1									
CSER	<u>0</u>	BIOL 455		3									
Total	15	CSER		<u>0</u>									
			Total	14									
SENIOR YEAR													
BIBL 110	2	BIBL 105		2									
THEO 202	2	Cultural Studies Elective <sup>1</sup>		3									
Social Sciences Elective <sup>1</sup>	3	BIOL 303		4									
CHEM 461	3	CHEM 462		3									
CHEM 465	3	CHEM 466		1									
CRST 290 or CRST 390	3	CSER		0									
CSER	<u>0</u>		Total	13									
Total	16												

All applicable prerequisites must be met

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<sup>&</sup>lt;sup>1</sup>Refer to the list of approved general education electives at <a href="https://www.liberty.edu/gened">www.liberty.edu/gened</a> before enrolling in core competency requirements <sup>2</sup>Choose CHEM 121 <a href="https://original.org/december/97">OR CHEM 131</a> and 135

 $<sup>^3</sup> MATH\ 131,\ 211,\ PHYS\ 231$  and 232 are strongly recommended

<sup>&</sup>lt;sup>4</sup>Choose CHEM 122 *OR* CHEM 132 and 136

<sup>&</sup>lt;sup>5</sup>All students must pass the Computer Assessment OR complete applicable INFT course; refer to <a href="www.liberty.edu/computerassessment">www.liberty.edu/computerassessment</a> for more information