

# COLLEGE OF ARTS & SCIENCES

## 2020-21 BS CHEMISTRY DEGREE PLAN with Teaching Licensure

FIRST YEAR - FRESHMAN (20-21)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
MAT	120	Precalculus <sup>2</sup>	4	MAT	122	Analytics & Calculus I	4
CHE	121	General Chemistry I	3	CHE	122	General Chemistry II	3
CHE	121L	General Chemistry I Lab	1	CHE	122L	General Chemistry II Lab	1
ENG	101	English Composition I <sup>1</sup>	3	ENG	102	English Composition II <sup>1</sup>	3
BPH	100	Special Topics in Science	0.5	BIB	122	Acts of the Apostles <sup>1</sup>	2
BIB	121	Life of Christ <sup>1</sup>	2			Critical/Creative Elective <sup>1</sup>	3
EDU	130	Introduction to Education	3	EDU	250	Prof. Reflection & Planning I	1
			16.5				17
SECOND YEAR - SOPHOMORE (21-22)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
SPE	240	Special Education Foundations	3			Behaviorial Science Elective <sup>1</sup>	3
PHS	211	Physics for Sci. & Engr. I <sup>4</sup>	4	COM	140	Speech Communication <sup>1</sup>	3
CHE	321	Organic Chemistry I	4	CHE	322	Organic Chemistry II	4
BIO	205	Cell Biology <sup>6</sup>	3	EDU	327	Tests & Measurement	3
BIB		Bible Course	2	BIB		Bible Course	2
				PSY	306	Educational Psychology	3
				BPH	200	Special Topics in Science	0.5
			16				19
THIRD YEAR - JUNIOR (22-23)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
RDG	321	Teaching Secondary Literacy	3	HIS		History Elective <sup>1</sup>	3
CHE	331	Biochemistry I <sup>6</sup>	4	CHE	332	Biochemistry II <sup>6</sup>	4
BIO	333	Cell Biology & Molec. Gen. <sup>6</sup>	4	CHE		UD Chem. Elective (or Bio) <sup>3</sup>	4
EDU	320	Technology in the Classroom	3	BIB		Bible Course	2
BIB	(4)346	Christ. Evid. / Found. of Faith <sup>1</sup>	3	BIO	444	Biological Conc. of Origins	3
BPH	300	Special Topics in Science	1	BPH	400	Science Seminar	1
			18				17
FOURTH YEAR - SENIOR (23-24)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
CHE	421	Quantum Chemistry <sup>5,7</sup>	4	EDU	447	Student Teaching, Secondary	12
CHE		UD Chem. Elective (or Bio) <sup>3</sup>	4	EDU	450	Prof. Reflection & Planning III	1
BIB	495	Values <sup>1</sup>	3				
EDU	350	Prof. Reflection & Planning II	1				
EDU	428	Classroom Management	2				
EDU	431D	Educational Strategies - Secondary	3				
			17				13

<sup>1</sup> Liberal Arts Core classes

<sup>2</sup> Needed if math ACS score is between 24-26

<sup>3</sup> Chemistry track need UD, biochem need either chem or bio (can be lower)

<sup>4</sup> Can be replaced with General Physics for biochemistry track majors

<sup>5</sup> Required only for chemistry track

<sup>6</sup> Required only for biochemistry track

<sup>7</sup> Only need one for biochemistry track

<sup>8</sup> Options if a student would like a minor

## ADDITIONAL ITEMS RELATED TO THE MAJOR

\*Students may substitute MAT 224 Analytics and Calculus III or upper-division mathematics courses for up to four (4) of the additional required credit hours. Students may also use CHE 498 or HON 498 Independent Study (must be chemistry or biology related) for up to three (3) of the additional required credit hours. Students completing the pre-engineering program may count ENS 231 Engineering Mechanics I and ENS 232 Engineering Mechanics II toward meeting the seven (7) chemistry elective hours.

**The following guidelines are important. Failure to follow these guidelines may delay graduation.**

1. Plan schedules carefully. Plan to fulfill prerequisites for future courses.
2. Do not alter the sequence of courses without consulting with your academic adviser as not all classes are offered every semester.
3. Before the enrollment period, check to make sure holds will not prevent you from registration.
4. Register for classes early during the registration period to secure classes.

**The Four-Year Degree Plan is a suggested plan of study. This plan does not replace the *Undergraduate Catalog*. The *Undergraduate Catalog* provides the official listing of program requirements.**

2020-21 Undergraduate Liberal Arts Core Requirements			
<b>I. Biblical Values</b>		<b>B. Natural Sciences</b>	
BIB 121 <b>AND</b> 122 <b>AND</b> 346 <b>OR</b> 446	7	BIO 100 <b>OR</b> BIO 105 <b>OR</b> BIO 110 <b>OR</b> 3 or 4	
<b>II. Basic Skills</b>		BIO 111 <b>OR</b> BIO 112 <b>OR</b> BIO 211 <b>OR</b>	
<b>A. Written Communication</b>		CHE 121 w/CHE121L <b>OR</b> PHS 111 <b>OR</b>	
ENG 101 <b>AND</b> ENG 102	6	PHS 112 <b>OR</b> PHS 201 <b>OR</b> PHS 211	
<b>B. Oral Communication</b>		<b>C. Arts and Humanities</b>	
COM 140 Speech Communication	3	<b>1. History</b>	3
<b>C. Quantitative Reasoning</b>		HIS 111 <b>OR</b> HIS 112 <b>OR</b> HIS 221 <b>OR</b>	
MAT 100 <b>OR</b> MAT 101 <b>OR</b>	3 or 4	HIS 222 <b>OR</b> HUM399A <b>OR</b> POL 251	
MAT 120 <b>OR</b> MAT 122 <b>OR</b> MAT 235		<b>2. Creative Works</b>	3
<b>III. Broadened Perspectives</b>		ART 110 <b>OR</b> ART 201 <b>OR</b> ART 234 <b>OR</b>	
<b>A. Behavioral Sciences</b>		ENG 225 <b>OR</b> ENG 226 <b>OR</b> ENG 235 <b>OR</b>	
BIB/FAM 230 <b>OR</b> PSY 210 <b>OR</b>	3	ENG 236 <b>OR</b> ENG 245 <b>OR</b> ENG 246 <b>OR</b>	
SOC 241 <b>OR</b> SWK 251		ENG 299A/399A <b>OR</b> MUS 110 <b>OR</b> MUS 214 <b>OR</b>	
Complete course names and descriptions for the liberal arts core requirements are located in the <i>Undergraduate Catalog</i> .		PHI 243 <b>OR</b> PHI 245 <b>OR</b> PHI 246 <b>OR</b>	
		THE 160 <b>OR</b> THE 265 <b>OR</b> THE 299A/399A	
		<b>3. Humanities Capstone</b>	3
		BIB/HUM 495	