

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 ²	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 ¹	3	ENG	102	English Composition II ¹	3
BPH	100	Special Topics in Science	0.5	BIB	122	Acts of the Apostles ¹	2
BIB	121	Life of Christ ¹	2	EDU	250	Prof. Reflection & Planning I	1
EDU	130	Introduction to Education	3				
			16.5				14
SECOND YEAR - SOPHOMORE (21-22)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
MAT	223	Analytics & Calculus II ⁵	4			Behaviorial Science Elective ¹	3
PHS	211	Physics for Sci. & Engr. I ⁴	4	PHS	212	Physics for Sci. & Engr. II ²	4
CHE	321	Organic Chemistry I	4	CHE	322	Organic Chemistry II	4
SPE	240	Special Education Foundations	3	PSY	306	Educational Psychology	3
BPH	200	Special Topics in Science	0.5	BIB		Bible Course	2
BIB		Bible Course	2				
			17.5				16
THIRD YEAR - JUNIOR (22-23)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
HIS		History Elective ¹	3	CHE	221	Analytical Chemistry ⁵	4
EDU	320	Technology in the Classroom	3			Critical/Creative Elective ¹	3
EDU	327	Tests and Measurement	3	COM	140	Speech Communication ¹	3
RDG	321	Teaching Secondary Literacy	3	CHE		UD Chem. Elective (or Bio) ³	4
BIB	(4)346	Christ. Evid. / Found. of Faith ¹	3	BIO	444	Biological Conc. of Origins	3
BPH	300	Special Topics in Science	1	BIB		Bible Course	2
			16				19
FOURTH YEAR - SENIOR (23-24)							
Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
CHE	421	Quantum Chemistry ^{5,7}	4	EDU	447	Student Teaching, Secondary	12
EDU	428	Classroom Management	2	EDU	450	Prof. Reflection & Planning III	1
CHE		UD Chem. Elective (or Bio) ³	3	CHE	422	Chem Kinetics & Thermo	4
EDU	431D	Educational Strategies - Secondary	3				
BIB	495	Values ¹	3				
EDU	350	Prof. Reflection & Planning II	1				
BPH	400	Science Seminar	1				
			17				17

¹ Liberal Arts Core classes

² Needed if math ACS score is between 24-26

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

⁴ Can be replaced with General Physics for biochemistry track majors

⁵ Required only for chemistry track

⁶ Required only for biochemistry track

⁷ Only need one for biochemistry track

⁸ 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			
I. Biblical Values		B. Natural Sciences	
BIB 121 AND 122 AND 346 OR 446	7	BIO 100 OR BIO 105 OR BIO 110 OR BIO 111 OR BIO 112 OR BIO 211 OR CHE 121 w/CHE121L OR PHS 111 OR PHS 112 OR PHS 201 OR PHS 211	3 or 4
II. Basic Skills		C. Arts and Humanities	
A. Written Communication		1. History	
ENG 101 AND ENG 102	6	HIS 111 OR HIS 112 OR HIS 221 OR HIS 222 OR HUM399A OR POL 251	3
B. Oral Communication		2. Creative Works	
COM 140 Speech Communication	3	ART 110 OR ART 201 OR ART 234 OR ENG 225 OR ENG 226 OR ENG 235 OR ENG 236 OR ENG 245 OR ENG 246 OR ENG 299A/399A OR MUS 110 OR MUS 214 OR PHI 243 OR PHI 245 OR PHI 246 OR THE 160 OR THE 265 OR THE 299A/399A	3
C. Quantitative Reasoning		3. Humanities Capstone	
MAT 100 OR MAT 101 OR MAT 120 OR MAT 122 OR MAT 235	3 or 4	BIB/HUM 495	3
III. Broadened Perspectives			
A. Behavioral Sciences			
BIB/FAM 230 OR PSY 210 OR SOC 241 OR SWK 251	3		
Complete course names and descriptions for the liberal arts core requirements are located in the <i>Undergraduate Catalog</i> .			