## Concord University Bachelor of Science-Chemistry

Registrar's Office Official Document

120 hours minimum for graduation with a 2.00 average overall

56 hours from a four-year institution Course Title CR GR OP Written and Oral Communications (9 credit hours) Select one course from BGEN 205 or COMM 101 ENGL 101 Composition & Rhetoric I 3 ENGL 102 Composition & Rhetoric II Literature and Humanities (6 credit hours) Select one (1) course from Literature and one (1) course from History and Philosophy. \*May be repeated for 3 credit hours. ENGL 203, 204, \*224 or \*225 HIST 101, 102, 203, 204, PHIL 101, 308, 316, or 361 Fine Arts–(3 credit hours) Select one (1) course from the following: **ART** 101, 103, 105, 106, 204, 205, 216, 303, 304, 308, MUS 101, \*451, \*453A, or **THEA** 102 Social and Behavioral Sciences (9 credit hours) Select one (1) course from three different categories. **Category 1 - Business and Professional** 3 **Studies** BGEN 105, ECON 203, ECON 204. FIN 200, RTM 100 or SOWK 161 3 Category 2 - Geography GEOG 101, 255 or 321 3 Category 3 - Political Science POSC 101, 104, or 202 Category 4 - Psychology PSY 101 or 200 Category 5 - Sociology SOC 101, 201, or 301 Natural Sciences (7-8 credit hours) Select one (1) course from two different categories. Category 1-Biological Science See CHEM 101 BIOL 101, 102, 121, or 122 Major Category 2-Earth & Space Science 3-4 GEOL 101, GEOL 150, GEOG 200, PHSC 104, or **PHYS 105** Category 3-Physical Science CHEM 100, CHEM 101/111, PHSC 103, PHYS 101, or PHYS 201 Mathematics (3 credit hours) Select one (1) Mathematics course numbered 100 or higher. See MATH 103 Major Physical Wellness (2 credit hours) Select one or more courses listed below for a total of at least two hours. **H ED** 120, 304, **P ED** 101M, 117, 118, or **RTM** 220 Modern/Classical Language – (Optional 6 credit hours) Select two courses within the same Modern/Classical Language for substitution purposes. May not substitute Modern Language for ENGL 101, ENGL 102, the 3 hour Mathematics requirement or the 4-hour lab

science requirement

2019-2020 Catalog

Chemistry Co	ore Curriculum (2.00 GPA required)		
CHEM 101	General Chemistry I	3	
CHEM 111	General Chemistry Lab I	1	
CHEM 102	General Chemistry II	3	
CHEM 112	General Chemistry Lab II	1	
CHEM 210	Chemical Laboratory Safety	1	
CHEM 219 or PHYS 219	Laboratory Research Methods	1	
CHEM 331	Organic Chemistry I	4	
CHEM 335	Introduction to Inorganic and Physical Chemistry	4	
CHEM 341 CHEM 347	Biochemistry I Biochemistry Lab	3	
CHEM 351 CHEM 357	Analytical Chemistry Analytical Chemistry Lab	3 2	
PHYS 101 or PHYS 201	Introductory Physics or University Physics w/Calculus 1	4	
PHYS 102 or PHYS 202	Intermediate Physics or University Physics w/Calculus 2	4	
MATH 103	College Algebra	3	
MATH 104	College Trigonometry	3	
MATH 253	Calculus w/Analytic Geometry I	4	
	Four (4) or more credit hours of MATH 105 and/or CS 151 or higher	4	

## Students must select <u>ONE</u> of the concentrations on the following page

## RESIDENCE CREDIT:

36 hours at Concord

16 of last 32 hours at Concord

Note: In some degree programs, this is prior to entering professional training. 9 hours in Major, Teaching Fields

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BIOCHEMISTRY (PRE-MEDICINE)				
	12-16 credit hours from the following: BIOL 302/ CHEM 302, BIOL 329, BIOL 401, BIOL 419, CHEM 470, CHEM 471, or any 300-400 level electives in CHEM (no more than 8 credits) or PHYS (no more than 6 credits) One 4 hour course may be waived for students completing PHYS 201 and PHYS 202			

PROFESSIONAL CHEMISTRY				
	12-16 credit hours from the following:			
	BIOL 302/ CHEM 302, CHEM 470, CHEM 471, CHEM 300 level or higher, or PHYS 300 level or higher			
	One 4 hour course may be waived for students completing PHYS 201 and PHYS 202			

GEOCHEMISTRY				
	12-16 credit hours from the following: GEOL 205, GEOL 369, GEOL 375, GEOL/CHEM 4701-4704, or any electives in CHEM 300 level or higher (no more than 4 credits) or GEOL 380 or higher (no more than 6 credits) One 4 hour course may be waived for students completing PHYS 201 and PHYS 202			

3 + 1 HEALTH SCIENCES (PRE-PHARMACY)				
BIOL 329	Microbiology	4		
CHEM 332	Organic Chemistry II	4		
CHEM 460 or MDTH 460	Pharmacy Practicum or Medical Technology Practicum (30 hours from an approved School of Pharmacy or school of Clinical Laboratory Science)	15 15		

\*CHEM 335, Introduction to Inorganic and Physical Chemistry, is not required for 3+1 Health Sciences. However, students who do not obtain admission to an approved school of pharmacy or medical technology will have to take this course and pursue a different elective concentration during their senior year.

MATH 103 and/or MATH 104 will be waived for those students establishing "equivalent proficiency" as defined by the Department of Mathematics (ACT Math Score 25 or 28).