DEGREE WORKSHEET FOR:
BS Chemistry, Pre-Health Emphasis
2017-2018 Catalog
Degree Requirements – 120 credits

YEAR 1- FALL (15 credits)		YEAR 1- SPRING (15 credits)	
CHEM 111/111L Principles of Chemistry I	4/1 credits	CHEM 112/112L Principles of Chemistry II	4/1 credits
ENG 122 College Composition (LAC Area 1a)	3 credits	MATH 131[2] Calculus I (LAC Area 2)	4 credits
BIO 110 Principles of Biology (LAC Area 6)	4 credits	Liberal Arts Core[1]	6 credits
Liberal Arts Core[1]	3 credits		
YEAR 2- FALL (16 credits)		**YEAR 2-SPRING (16 credits)**	
CHEM 331/331L Organic Chemistry I (F)	4/1 credits	CHEM 332/332L Organic Chemistry II (S)	4/1 credits
PHYS 220 Introductory Physics I (LAC Area 6)	5 credits	PHYS 221 Introductory Physics II	5 credits
BIO 210 Cell Biology	3 credits	Mathematics Elective[3]	3 credits
Liberal Arts Core[1]	3 credits	Liberal Arts Core[1]	3 credits
YEAR 3- FALL (14 credits)		**YEAR 3- SPRING (15 credits)**	
CHEM 321 Chemical Analysis (F)	4 credits	CHEM 450/450L Survey of Physical Chemistry (S)	3/1 credits
CHEM 481 General Biochemistry I (F)	3 credits	CHEM 482/482L General Biochemistry II (S)	3/1 credits
CHEM 441 Inorganic Chemistry I (F)	3 credits	CHEM 481L General Biochemistry I (S)	1 credit
SCI 291[5] Scientific Writing (LAC Area 1b)	3 credits	Electives	6 credits
Liberal Arts Core[1]	1 credit		
YEAR 4- FALL (14 credits)		**YEAR 4- SPRING (15 credits)**	
Biology Elective[4]	3-4 credits	Biology Elective[4]	4 credits
Electives	10-11 credits	Electives	11 credits
		Chemistry Assessment Exam[6]	0 credits

Admission Requirement – No separate admission requirement.
Minor Required- No minor required.

Contact Information – Department of Chemistry & Biochemistry
Ross Hall Room 3480, 970-351-2559
Department Web Page: http://www.unco.edu/nhs/chemistry-biochemistry/

This worksheet is a recommended schedule to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; have at least 40 credit hours in courses designated as Liberal Arts Core; and meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation. **Students must consult with their major advisor to receive information on additional graduation requirements.**

Notes

1 Students may select courses from LAC areas 7and 8 that also count for areas 3, 4, or 5.

2 Students who lack sufficient preparation in mathematics may need to start in MATH 124 College Algebra (4), MATH 125 Plane Trigonometry (3), or MATH 127 Elementary Functions (4). MATH 171 may be substituted for MATH 131. Consult your advisor.

3 Students are required to take a CS or STAT course (3 credits). Consult advisor for computer science (CS) or statistics (STAT) courses to fulfill mathematics elective.

4 Students are required to take 7-8 hours of biology electives.
Biology Electives –Select two of the following:

BIO 341	Human Anatomy (3)
BIO 350	Human Physiology (4)
BIO 351	Microbiology (4)

5 It is highly recommended that students substitute ENG 123 with SCI 291 (3)—Scientific Writing.

6 All students must take a chemistry major assessment exam prior to graduation.

<u>Pre-Medical, Pre-Dental, Pre-Optometry, Pre-Veterinary, Pre-Podiatry and Pre-Pharmacy coursework</u>

This program offers training in chemistry, mathematics and physics with a broad base in biological sciences and biochemistry. It provides a solid foundation in chemistry and biological sciences for those students planning to pursue professional studies in dentistry, medicine, optometry, podiatry, pharmacy or veterinary medicine.

Students completing this degree emphasis should verify that the elective courses taken satisfy the requirements or recommendations of the particular professional school they wish to attend. Acceptance into these schools is competitive. All pre-health students should seek assistance from an advisor to confirm their course plans. Students considering graduate study in chemistry or biochemistry may be required to complete additional course work in chemistry and/or mathematics depending on the entrance requirements of the specific graduate school.

A. The four-year plan described on the other side of this sheet is a suggested track for completing this major. You must meet with your advisor each semester to determine an appropriate plan.

B. Upper-level courses are generally taught only one semester per year and are marked on the sheet as F (Fall) or S (Spring). In this plan courses are listed in order of required prerequisites first.

C. Some upper-level courses are separate from laboratory; e.g., CHEM 481/CHEM 481L General Biochemistry I and Experimental Biochemistry I and CHEM 482/CHEM 482L General Biochemistry II and Experimental Biochemistry II. In these cases, CHEM 481 is taught in the Fall and CHEM 482 and the two laboratories are taught in the Spring, CHEM 481L meeting in two 3-hour blocks/week the first half of the semester and CHEM 482L the same schedule the second half of the semester—in any case the lecture must be taken either concurrently or would be considered a prerequisite to the laboratory.

D. Graduate level CHEM courses are recommended for juniors and seniors. Other recommended electives include MATH 132, MATH 221, MATH 335, STAT 150, PHYS 321, and PHYS 343.

E. Students majoring in chemistry must earn a grade of “C” or better (C- is not acceptable) in all courses having a CHEM prefix which count toward the major.