DEGREE WORKSHEET FOR:

Mathematics B.S. – Applied Mathematical Sciences
Emphasis, Applied Statistics Concentration

2021-2022 Catalog

Degree Requirements – 120 credits

YEAR 1- FALL (14 credits)		YEAR 1- SPRING (16 credits)	
ENG 122 College Composition (LAW1*)	3 credits	MATH 132 Calculus II (LAX1*)	4 credits
MATH 131 Calculus I (LAX1*)	4 credits	MATH 228 Discrete Mathematics	3 credits
CS 120 Computer Programming	3 credits	CS 160 Structured Programming	3 credits
Liberal Arts Curriculum[b]/Electives[c]	3 credits	Liberal Arts Curriculum[b]/Electives[c]	6 credits
MATH 102 Success in Math Science (suggested elective)	1 credit		
YEAR 2- FALL (15 credits)		**YEAR 2-SPRING (15 credits)**	
MATH 233 Calculus III	4 credits	MATH 221 Elementary Linear Algebra	3 credits
MATH 350 Elementary Probability Theory	4 credits	MATH 351 Elementary Statistics Theory	3 credits
Liberal Arts Curriculum[b]/Electives[c]	7 credits	Liberal Arts Curriculum[b]/Electives[c]	9 credits
YEAR 3- FALL (15 credits)		**YEAR 3- SPRING (15 credits)**	
MATH 335 Differential Equations	3 credits	MATH/CS/STAT Elective[d]	3 credits
MATH 495 Topics in Mathematics[a]	3 credits	Liberal Arts Curriculum[b]/Electives[c]	12 credits
STAT 411 Fundamentals of Data Science[e]	3 credits		
Liberal Arts Curriculum[b]/Electives[c]	6 credits		
YEAR 4- FALL (15 credits)		**YEAR 4- SPRING (15 credits)**	
STAT 406 Multiple Linear Regression[e]	3 credits	MATH/CS/STAT Elective[d]	3 credits
Liberal Arts Curriculum[b]/Electives[c]	12 credits	Liberal Arts Curriculum[b]/Electives[c]	12 credits

***See the Liberal Arts Curriculum webpage for more information**

This four-year plan 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 31 credit hours in courses designated as Liberal Arts Curriculum; 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 any additional graduation requirements.**

Admission Requirement – No separate admission requirement.
Minor Required – No Minor required.
Contact Information –

School of Mathematical Sciences
Ross Hall Room 2239, 970-351-2820
School Web Page: http://www.unco.edu/nhs/mathematical-sciences/

Notes – See page 2.

BS Mathematics, Applied Mathematical Sciences Emphasis, Applied Statistics Concentration (cont.)

Notes

1 [a] MATH 495 is only offered every ODD numbered fall.

2 [b] Liberal Arts Curriculum courses can be taken any semester. It is strongly suggested that they be evenly distributed over the entire 4 years of study rather than concentrated in the first 2 years. NOTE: You need to complete 31 Liberal Arts Curriculum credits total. Math 131 and Math 132 are required in the program and also satisfy the 3 credit Liberal Arts Curriculum Mathematics requirement. Most students will take ENG 122 for their first composition class unless they have placed out of the introductory composition requirement. Students need to take 6 credits total of composition courses, 7 credits of natural and physical sciences credits, and 15 credits from Arts & Humanities, History, Social & Behavioral Sciences, U.S. Multicultural, and International Studies. Of these 15 credits, one must be designated as a Multicultural Studies [MS] class, and one must be designated as an International Studies [IS] class.

3 [c] You need to complete 40-43 credits of University-wide Electives.

4 [d] You need to complete 6 additional credits from the concentration electives. Choose from: MATH 321, 322, 336, 341, 342, 375, 391, 431, 432, 437, 460, STAT 409 (if offered), or any CS course at the 300-level or higher.

5 [e] STAT 406 and STAT 411 are offered every other fall in alternate falls. They may be taken in either order.

Applied Statistics Concentration focuses on statistical foundations and their applications to problems in varied disciplines, e.g. business, agriculture, medicine, law, literature, psychology and other social sciences, and on the design and analysis of statistical models in a wide variety of settings. Graduates are prepared for positions involving the design and analysis of statistical models in such areas as environmental, governmental, industrial, military, and social settings and for additional graduate study in the areas of applied statistics and operations research.

*Liberal Arts Curriculum Course Indicators			
LAA1	Arts & Humanities: Arts & Expression	LAIS	International Studies
LAA2	Arts & Humanities: Literature & Humanities	LAMS	U.S. Multicultural Studies
LAA3	Arts & Humanities: Ways of Thinking	LAS1	Natural & Physical Sciences
LAA4	Arts & Humanities: World Languages	LASL	Natural & Physical Sciences LAB
LAB1	Social & Behavior Sciences: Economic or Political Systems	LAW1	Introductory Written Communication
LAB2	Social & Behavior Sciences: Geography	LAW2	Intermediate Written Communication
LAB3	Social & Behavior Sciences: Human Behavior, Culture or Social Frameworks	LAW3	Advanced Written Communication
LAH1	History	LAX1	Mathematics