## CLEAR PATH for ADVISING – *Biology: STEM Education, B.S.*

## Please refer to the Undergraduate Catalog for further program requirements and course descriptions.

First Year – 30-34 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
BIOL 1110/1110L: Principles of Biology I/Lab (Natural		BIOL 1120/1120L: Principles of Biology II/Lab (Natural	1.
Science)	4	Science)	4
CHEM 1110/1110L: General Chemistry I/Lab	4	CHEM 1120/1120L: General Chemistry II/Lab	4
MATH 1130: College Algebra or MATH 1730: Combined		MATH 1830: Calculus for Management, Life, and Social	
MATH 1130: <i>College Algebra</i> or MATH 1730: <i>Combined Precalculus</i> (Quantitative Reasoning)	3-4	Sciences or MATH 1950: Calculus with Analytic Geometry	3-4
		/ (Quantitative Reasoning)	
Writing and Communication (ENGL 1010 or 1011)	3-4	STEM 1030: Step One/Two: Inquiry-Based Mathematics	2
		and Science Teaching	
		Writing and Communication (ENGL 1020)	3
		Elective (MATH 1799)	0-1
	14-16		16-18
Second Year – 31-34 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
BIOL 1130: Principles of Biology III	3	BIOL 3250: Genetics	3
CHEM 3010/3010L: Organic Chemistry I/Lab	4	BIOL 3350: Evolution	3
STEM 2010: Knowing and Learning	3	STEM 2020: Classroom Interactions	3
Behavioral and Social Science	3	Humanities and Fine Arts	3-4
Humanities and Fine Arts	3-4	Humanities and Fine Arts	3-4
	16-17		15-17
Third Year – 34-36 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
BIOL 3060: Ecology	3	BIOL Elective (4000 level)	4
EDUC 2170: Technology and Learning	1	BIOL Elective (4000 level)	4
MATH 2100: Introductory Statistics	3	STEM 3020: Research Methods in Science	3
PHYS 1030/1030L: General Physics - Mechanics and	4	Behavioral and Social Science	3
Heat/Lab or GEOL 1120/1120L: Historical Geology/Lab	4		
STEM 3010: Perspectives on Science and Mathematics	3	Individual and Global Citizenship	3-4
Humanities and Fine Arts	3-4		
	17-18		17-18
Fourth Year – 27-28 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
BIOL Elective (4000 level)	4	EDUC 4420: Professional Seminar	2
BIOL Elective (4000 level)	4	STEM 4020: Apprentice Teaching	10
Biology Elective (2000-4000 Level)	4		1
STEM 4010: Project-Based Instruction	3		1
Elective	0-1		1
	15-16		12
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Completed:			
Graduation Requirements:	Hrs	Degree Requirements:	Hrs

completeu.			
Graduation Requirements:	Hrs	Degree Requirements:	Hrs
124 Total Hours		27-33 General Education Hours	
39 Upper Division (3000-4000) Hours		95-97 Program (Major) Hours	
30 Hours at UTC		Minor (Not Required)	
45 Hours at 4-year Institution		0-2 Elective Hours	
		Foreign Language (Not Required)	