Transfer       Articulation Agreement         Transfer       BACHELOR OF SCIENCE: CHEMISTRY         Biochemistry       Biochemistry         Catalog Year 2021- 2022				
Murray State College		East Central University		
Associate of Science–Chemistr BIO 1114 General Biological Science	"Y	Bachelor of Science–Chemistry	_	
CIS 1113 Computer Applications COL 1211 Academic Success		<ul> <li>MATH 2825 Calculus W/ Analytic Geometry 1</li> <li>BIOL 2184 Anatomy</li> <li>CHEM 3114 Organic Chemistry I</li> </ul>	I	
ENG 1113 English Comp I HST 1483 U.S. History to 1865 OR HST 14 History since 1865	493 U.S.	• —3 hrs. Elective	16 hr	
MTH 1513 Pre Calculus*	17 hrs.	<ul> <li>BIOL 3634 Human Physiology</li> <li>BIOL 4313 Cell and Molecular Biology</li> <li>CHEM 3214 Quantitative Analysis I</li> </ul>		
BOT 1114 General Botany ENG 1213 English Comp II GVT 1113 American Federal Government		CHEM 4114 Organic Chemistry II	15 h	
HWP 1112 Personal Health MTH 1613 Plane Trigonometry*		<ul> <li>CHEM 4514 Physical Chemistry I</li> <li>CHEM 4213 Biochemistry</li> <li>CHEM 4221 Biochemistry Lab</li> </ul>		
—3 hrs. Humanities Elective CHM 1114 Gen Chemistry I*	18 hrs.	<ul> <li>CHEM 4221 Biochemistry Lab</li> <li>CHEM 4413 Advanced Inorganic Chemistry</li> <li>—4 hrs. Elective</li> </ul>	15 hi	
PHY 1114 Physics I* ZOO 1114 Zoology		BIOL 4545 Advanced Molecular Biology		
3 hrs. Humanities or Art Elective	15 hrs.	<ul> <li>CHEM 3484 Instrumental Analysis</li> <li>CHEM 4523 Advanced Biochemistry</li> <li>CHEM 4531 Advanced Biochemistry Lab</li> </ul>		
CHM 1214 General Chemistry II* PHY 1214 General Physics II* PSY 1113 Intro to Psychology <b>OR</b> SOC 111	3 Intro to	• —3 hrs. Elective	16 hr	
Sociology SPC 1113 Fundamentals of Speech	14 hrs.			
Cotal Credit Hours	62 hrs.	Total Credit Hours	62 hi	



YOUR FUTURE - YOUR CHOICE



Murray State College	East Central University
CHM 1114 Gen Chemistry I	CHEM 1114 General Chemistry I
CHM 1214 Gen Chemistry II	CHEM 1214 General Chemistry II
MTH 1513 Pre Calculus	MATH 1513 College Algebra
MTH 1613 Plane Trigonometry	MATH 1713 Trigonometry
PHY 1114 General Physics I	PHYS 1114 General Physics I
PHY 1214 General Physics II	PHYS 1214 General Physics II

## **Course Equivalency Table**

⇒ PHY 2014 Engineering Physics I and PHY 2114 Engineering Physics II maybe taken in place of PHY 1114 and PHY 1214

- $\Rightarrow$  CHEM 3484 Instrumental Analysis is only offered in the Spring semester on even years.
- $\Rightarrow$  CHEM 4413 Advanced Inorganic Chemistry is only offered in the Spring Semester on odd years.
- $\Rightarrow$  CHEM 3214 Quantitative Analysis I is offered every Spring
- $\Rightarrow$  CHEM 4514 is ONLY offered in the Fall of even numbered years.
- $\Rightarrow$  CHEM 4213 Biochemistry is offered every Fall.

## NOTES:

- ⇒ Articulated using MSC's A.S. in Science Chemistry and without a Minor. A Minor is not required.
- ⇒ A student transferring with an Associate degree in Arts or Science from MSC fulfills ECU's general education requirement by transferring his or her credit to East Central University. Transferring credit for general education does not eliminate or otherwise affect any of the following ECU requirements: (1) prerequisites;
  (2) specific requirements in majors, minors, or related work in these areas; or (3) the requirements for teacher certification. General Education equivalencies can be found by referring to either the Oklahoma State Regents Transfer Matrix or the ECU Transfer Matrix. Both matrices can be found at www.ecok.edu by clicking on Admissions and scrolling down to Course Transfer Matrix.
- ⇒ A student must earn <u>at least 40 semester hours in upper-division</u> courses (numbered 3000 or higher). A course taught at MSC may equate in content to an ECU 3000-4000 level course, but it will not be counted as part of the 40 hours of upper level courses.
- $\Rightarrow$  A student must earn <u>at least 60 semester hours</u>, excluding physical activity courses, at a baccalaureate degree granting institution.
- $\Rightarrow$  A Student must earn <u>at least 124 credit hours</u> that apply to an ECU Bachelor's degree.