

Transfer  
with  
Ease

# Articulation Agreement

## BACHELOR OF SCIENCE: CHEMISTRY

### Biochemistry

Catalog Year 2022- 2023

#### Murray State College

#### East Central University

##### Associate of Science—Chemistry

- BIO 1114 General Biological Science
- CIS 1113 Computer Applications
- COL 1211 Academic Success
- ENG 1113 English Comp I
- HST 1483 U.S. History to 1865 OR HST 1493 U.S. History since 1865
- MTH 1513 Pre Calculus\* 17 hrs.
  
- BOT 1114 General Botany
- ENG 1213 English Comp II
- GVT 1113 American Federal Government
- HWP 1112 Personal Health
- MTH 1613 Plane Trigonometry\*
- —3 hrs. Humanities Elective 18 hrs.
  
- CHM 1114 Gen Chemistry I\*
- PHY 1114 Physics I\*
- ZOO 1114 Zoology
- —3 hrs. Humanities or Art Elective 15 hrs.
  
- CHM 1214 General Chemistry II\*
- PHY 1214 General Physics II\*
- PSY 1113 Intro to Psychology OR SOC 1113 Intro to Sociology
- SPC 1113 Fundamentals of Speech 14 hrs.

Total Credit Hours 62 hrs.

\* Please see chart on second page for course equivalencies

##### Bachelor of Science—Chemistry

- MATH 2825 Calculus W/ Analytic Geometry I
- BIOL 2184 Anatomy
- CHEM 3114 Organic Chemistry I
- —3 hrs. Elective 16 hrs.
  
- BIOL 3634 Human Physiology
- BIOL 4313 Cell and Molecular Biology
- CHEM 3214 Quantitative Analysis I
- CHEM 4114 Organic Chemistry II 15 hrs.
  
- CHEM 4514 Physical Chemistry I
- CHEM 4213 Biochemistry
- CHEM 4221 Biochemistry Lab
- CHEM 4413 Advanced Inorganic Chemistry
- —4 hrs. Elective 15 hrs.
  
- BIOL 4545 Advanced Molecular Biology
- CHEM 3484 Instrumental Analysis
- CHEM 4523 Advanced Biochemistry
- CHEM 4531 Advanced Biochemistry Lab
- —3 hrs. Elective 16 hrs.

Total Credit Hours 62 hrs.



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# Course Equivalency Table

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

- ⇒ PHY 2014 Engineering Physics I and PHY 2114 Engineering Physics II maybe taken in place of PHY 1114 and PHY 1214
- ⇒ CHEM 3484 Instrumental Analysis is only offered in the Spring semester on even years.
- ⇒ CHEM 4413 Advanced Inorganic Chemistry is only offered in the Spring Semester on odd years.
- ⇒ CHEM 3214 Quantitative Analysis I is offered every Spring
- ⇒ CHEM 4514 is ONLY offered in the Fall of even numbered years.
- ⇒ 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](http://www.ecok.edu) by clicking on *Admissions* and scrolling down to *Course Transfer Matrix*.
- ⇒ A student must earn at least 40 semester hours in upper-division 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.
- ⇒ A student must earn at least 60 semester hours, excluding physical activity courses, at a baccalaureate degree granting institution.
- ⇒ A Student must earn at least 124 credit hours that apply to an ECU Bachelor's degree.