

**Transfer  
with  
Ease**

# Articulation Agreement

## BACHELOR OF SCIENCE: CHEMISTRY

### Biochemistry Catalog Year 2019 - 2020

#### Eastern Oklahoma State College

#### East Central University

##### Associate of Science - Physical Science

- OLS 1111 Orientation and Library Science
- ENGL 1113 Freshman Composition I
- POL SC 1113 American Federal Government
- CHEM 1315 General College Chemistry I\*
- SPCH 1113 Fundamentals of Speech **OR**  
SPCH 2233 Business & Professional Speech
- MATH 1513 College Algebra\* **18 hrs.**
  
- ENGL 1213 Freshman Composition II
- MATH 1613 Trigonometry\*
- BIOL 1114 General Biology
- HIST 1483 American History to 1877 **OR**  
HIST 1493 American History since 1877
- CHEM 1415 General College Chem II\* **18 hrs.**
  
- PHY 1114 General Physics I\*
- CHEM 2105 Organic Chemistry I\*
- CIS 1113 Computer Applications
- —3 hrs. Humanities (VI A) **15 hrs.**
  
- MATH 2235 Calculus I\*
- PHY 1214 General Physics II\*
- CHEM 2205 Organic Chemistry II\*
- —3 hrs. Humanities (VI B)
- —3 hrs. Social Science Elective **20 hrs.**

**Total Credit Hours 71 hrs.**

\*Please see chart on second page for course equivalencies

##### Bachelor of Science—Chemistry

- BIOL 1314 General Zoology **OR** BIOL 2344 General Microbiology
- CHEM 4514 Physical Chemistry I
- CHEM 4213 Biochemistry
- CHEM 4221 Biochemistry Lab
- ~3 hrs. Elective **15 hrs.**
  
- BIOL 2184 Anatomy
- CHEM 3214 Quantitative Analysis I
- ~3 hrs. Elective
- ~3 hrs. Elective **14 hrs.**
  
- BIOL 3634 Human Physiology
- BIOL 4313 Cell and Molecular Biology
- ~3 hrs. Elective
- ~3 hrs. Elective
- ~3 hrs. Elective **16 hrs.**
  
- BIOL 4545 Advanced Molecular Biology
- CHEM 3484 Instrumental Analysis
- CHEM 4413 Advanced Inorganic Chemistry
- CHEM 4523 Advanced Biochemistry
- CHEM 4531 Advanced Biochemistry Lab **16 hrs.**

**Total Credit Hours 61 hrs.**



**YOUR FUTURE - YOUR CHOICE**



## Course Equivalency Table

Eastern Oklahoma State College	East Central University
BIOL 1114 General Biology	BIOL 1114 General Biology
MATH 1513 College Algebra	MATH 1513 College Algebra
MATH 1613 Trigonometry	MATH 1713 Trigonometry
MATH 2235 Calculus I	MATH 2825 Calculus & Analytic Geometry I
CHEM 1315 General College Chemistry I	CHEM 1114 General Chemistry I
CHEM 1415 General College Chemistry II	CHEM 1214 General Chemistry II
CHEM 2105 Organic Chemistry I	CHEM 3114 Organic Chemistry I
CHEM 2205 Organic Chemistry II	CHEM 4114 Organic Chemistry II
PHY 1114 General Physics I	PHYS 1114 General Physics I
PHY 1214 General Physics II	PHYS 1214 General Physics II

**NOTE:**

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 EOSC's A.S. for Life Science and without a Minor. A Minor is not required.

⇒ A student transferring with an Associate degree in Arts or Science from EOSC 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 EOSC 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.