

# East Central College — Missouri S&T

## Biological Sciences BA with Secondary Education Teacher Certification

Transfer Guide Effective as of Fall 2025

### East Central College

### Missouri S&T

#### Communication Skills

Take all courses.

ENG 101	English Composition I	3	ENGLISH 1120	Exposition and Argumentation	3
ENG 102 or ENG 104	English Composition II or Technical Writing	3	ENGLISH 1160 or ENGLISH 3560	Writing and Research or Technical Writing	3
COM 110	Public Speaking	3	SPMS 1185	Principles of Speech	3
		Total Hours			Total Hours
		9			9

#### Social Sciences

Take all courses.

PSC 102	US Government: National and State	3	POL SCI 1200	American Government	3
PSY 101	General Psychology	3	PSYCH 1101	General Psychology	3
		Total Hours			Total Hours
		6			6

#### Humanities

Select 9 hours to include at least one course in each of the following areas: fine arts (art, music, or theatre), philosophy, literature.

ART 101 or MUS 101 or THE 101	Art Appreciation or Music Appreciation or Theatre Appreciation or other fine art	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Appreciation or Theatre via Video or other fine art	3
PHL 101 or PHL 111	Intro to Philosophy or Intro to Logic or other philosophy	3	PHILOS 1105 or PHILOS 1115	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction or other philosophy	3
ENG 210 or ENG 221 or ENG 124 or ENG 214 or ENG 215	Survey British Lit: Beginnings - 1784 or Survey American Lit: Beginnings - 1865 or World Literature I or Women's Literature or African-American Literature or other literature	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231 or ENGLISH 2242 or ENGLISH 2245 or	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I or Literature by Women or African American Literature or other literature	3
		Total Hours			Total Hours
		9			9

#### Mathematics and Sciences

Take all courses.

MTH 110	Intermediate Algebra or higher math	3	MATH 1103	Fundamentals of Algebra or higher math	3
CHM 111	General Chemistry I and Lab	5	CHEM 1310, 1319	General Chemistry I and Lab	5
CHM 112	General Chemistry II and Lab	5	CHEM 1320, 1510*	General Chemistry II (3) and Qualitative Analysis (2) *CHEM 1510 is not an S&T degree requirement. Will transfer as general credit.	3
BIO 111 or BIO 121	General Biology Lecture and Lab or Principles of Biology I and Lab	5	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology and Lab	4
		Total Hours			Total Hours
		18			15

#### Additional Degree Requirements

Select additional courses to total up to the maximum transfer credit hours shown below.

PHY 111 or PHY 102	College Physics I or Intro to Astronomy	3	PHYSICS 1145 or PHYSICS 1505	College Physics I (4) or Astronomy (3) Satisfies a 3-hour science requirement. Any additional credits apply to degree totals as general elective credit.	3-4
GEO 101	Introduction to Physical Geology	3	GEOLOGY 1110	Physical and Environmental Geology	3
BIO 122	Principles of Biology II and Lab	5	BIO SCI 1223, 1229	Biodiversity and Lab	5
EVR 103	Introduction to Environmental Sciences	3	BIO SCI 1173	Intro to Environmental Sciences	3
BIO 110	Ecology	3	BIO SCI 2263	Ecology	3
CHM 205	Organic Chemistry I and Lab	5	CHEM 2210	Organic Chemistry I	3
CHM 206	Organic Chemistry II and Lab	5	CHEM 2220	Organic Chemistry II	3
CIV 201	European Civilization I	3	HISTORY 1100	Early Western Civilization	3
CIV 202	European Civilization II	3	HISTORY 1200	Modern Western Civilization	3
MTH 150 or BUS 210 or MTH 242 or CIS 143 or EGR 221, 222 or EGR 251	Statistics or Basic Business Statistics or Engineering Statistics or Implementing Info Sys.-User Perspective or C++ Program Engineers and Lab (4) or Data Structures Or other statistics or computer class. Statistics preferred; computer class is acceptable.	3-4	STAT 1115 or STAT 1115 or STAT 3115 or IST 1551 or CS 1971, 1981 or CS 1500	Statistics for Social Sciences I or Statistics for Social Sciences I or Engineering Statistics or Implementing Infor Sys: User Persp or Computational Problem Solving Or other statistics or computer class. Statistics preferred; computer class is acceptable. Satisfies a 3-hour computer science/statistics requirement. Any additional credit hours apply to degree totals as general elective credit.	3

#### Teacher Certification Requirements

Take all courses.

EDU 201 or EDU 214	Foundations of Education or Multicultural Education	3	EDUC 1074	Education in a Diverse Society	2
EDU 190 or EDU 212	CDA Capstone-Childcare Practicum or Teaching Professional/Field Experience	3	EDUC 1104	Teacher Field Experience I	1
EDU 241	Educational Psychology	3	EDUC 2102 or PSYCH 2300	Educational Psychology	3
PSY 250	Human Development	3	PSYCH 3310	Developmental Psychology	3
EDU 244	Education of the Exceptional Learner	3	EDUC 2310 or PSYCH 4310	Education of the Exceptional Child or Psychology of the Exceptional Child	3
		Total Hours			Total Hours
		15			12

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/secondaryeducation/>.

Maximum credit hours to be transferred to Missouri S&T degree requirements.

68

Missouri S&T residency requirements: The last 60 hours of any Missouri S&T degree must be completed at Missouri S&T.  
must receive special permission from Missouri S&T to apply more than the maximum credit hours listed above toward the Missouri S&T degree.  
required to complete all courses on this guide before transferring to Missouri S&T.

Students  
Students are not