

## Bachelor of Science: Biology Education (grades 9-12)

Course	Title	Credits	Sem.
<b>Admission to Teacher Education Program Requirements</b>			
COMM 110	Essentials of Speaking & Listening	3	B
ENG 151	Academic Writing	4	B
MATH 110 OR MATH 200	College Algebra OR Intro to Statistics	3	B
<b>Professional Secondary Education Sequence</b>			
ED 101	Introduction to Education & Lab	3	B
ED 102	Technology: Classroom Applications & Portfolio	2	B
PSYC 341	Child & Adolescent Psychology	3	S, Su
SOCI 331 OR ED 312	Race & Ethnic Relations in America ( <i>meets LEP Goal 7</i> ) OR Human Relations for Teachers	3	B, Su B
SPED 290	Introduction to Special Needs & Lab	3	B
ED 301	The Teaching & Learning Process & Lab	3	F
ED 304	Professional Development & Classroom Applications	1	S
ED 304L	Pre-Student Teaching Experience Practicum	0	S
ED 430	Reading in the Content Areas	2	S
<b>Discipline Methods Courses</b>			
HLTH 225	Alcohol, Narcotics & Tobacco	2	F
ED 407	Secondary Methods: Science	3	S
<b>Required Content Classes</b>			
BIOL 200 & 200L	Introduction to Cellular Biology & Lab (BIOL 200L)	4	B
BIOL 201 & 201L	Introduction to Biodiversity & Evolution & Lab (BIOL 201L)	4	B
BIOL 287	Sophomore Biology Seminar	1	B
BIOL 302 & 302L	Botany & Lab (BIOL 302L)	4	S
BIOL 303 & 303L	Microbiology & Lab (BIOL 303L)	5	F
BIOL 305 & 305L	Human Anatomy & Physiology I & Lab (BIOL 305L)	4	F
BIOL 311 & 311L	Ecology & Lab (BIOL 311L)	4	F
BIOL 321 & 321L	Genetics & Lab (BIOL 321L)	4	S
BIOL 487	Senior Biology Seminar	1	B
<b>Required Related Fields Courses</b>			
ENVS 101 & 101L	Physical Geology & Lab (ENVS 101L)	4	B
ENVS 102 & 102L	Historical Geology & Lab (ENVS 102L)	4	S
MATH 200	Intro to Statistics	3	B
<b>Choose to complete either Group A or Group B</b>			
<b>Group A. (8 Credits)</b>			
CHEM 121 & 121L	Basic Chemistry & Lab (CHEM 121L)	4	F
CHEM 122 & 122L	Introductory Organic/Biochemistry & Lab (CHEM 122L)	4	S
<b>Group B. (9 Credits)</b>			
CHEM 231 & 231L	General Chemistry I & Lab (CHEM 231L)	4	F
CHEM 232 & 232L	General Chemistry II & Lab (CHEM 232L)	5	S
<b>Choose one Physics course with its corresponding lab:</b>			
PHYS 100 & 100L OR PHYS 121 & 121L OR PHYS 141 & 141L	Our Physical Universe & Lab (PHYS 100L) OR Introduction to Astronomy & Lab (PHYS 121L) OR College Physics I & Lab (PHYS 141L)	4	Varies F F
<b>Student Teaching</b>			
ED 469	Secondary Student Teaching: Grade 5-12	12	B
ED 473	Teacher Licensure	0	B
<b>Degree &amp; Major Requirements</b>			
	LEP/MnTC requirements	45	
	Biology Education major	54-55	
	Education courses	29	
	Total credits required for this degree	109-112	
	Total credits required for graduation	120	

Courses in the shaded area can be taken prior to admission to the Teacher Education Program

F = Fall S = Spring B = Both F & S Su = Summer

MTLE test required for licensure: Life Science Gr. 9-12 Content test (2 subtests) and Secondary Pedagogy test (2 subtests) prior to licensure.

**You are responsible to keep informed of any changes in requirements which may affect your academic career.**

This information is provided for advising. Official curriculum is published in the SMSU academic catalog: [www.SMSU.edu/catalog/](http://www.SMSU.edu/catalog/)  
 Students should refer to the online catalog or their DARS report for current curriculum. **This advising guide was printed: 2/23/2021**