

**West Texas A&M University**  
**Advising Services**  
**Degree Checklist**  
**2023-2024**

(For assistance completing this form, contact Advising Services at 806-651-5300)

**NAME:** \_\_\_\_\_ **WT ID:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**Science (Grades 7-12) Certification**  
**Department of Life, Earth and Environmental**  
**Sciences – NSB 348A 651-2570**

CORE CURRICULUM COURSES: 42 HOURS ♦		HRS
<b>Communication (Core 10)</b>		
ENGL 1301 Intro. to Academic Writing & Argumentation OR ENGL 1311 Writing About Ideas	3	
COMM 1315, 1318, or 1321	3	
<b>Mathematics (Core 20)</b>		
See University Core Requirements below	(3)	
<b>Life and Physical Sciences (Core 30)</b>		
See University Core Requirements below	(6)	
<b>Language, Philosophy and Culture (Core 40)</b>		
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312**/**, 2313*, 2315*, or 2371 Choose 1	3	
<b>Creative Arts (Core 50)</b>		
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 Choose 1	3	
<b>American History (Core 60)</b>		
HIST 1301, 1302, 2301, 2381, 2382 Choose 2	6	
<b>Government/Political Science (Core 70)</b>		
POSC 2305 and 2306	6	
<b>Social and Behavioral Sciences (Core 80)</b>		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; GEOG 1302; PSYC 2301; SOCI 1301 Choose 1	3	
<b>Component Area Option (Core 90)</b>		
See University Core Requirements below	(6)	
<b>SCIENCE (GRADES 7-12) CERTIFICATION REQUIREMENTS: 94-102 HOURS</b> A grade of "C" or better and a 2.75 GPA is required. ^		
<b>UNIVERSITY CORE REQUIREMENTS: 15 HOURS</b>		
<b>CORE 20</b> MATH 1314* College Algebra	3	
<b>CORE 30</b> PHYS 1401*[3] General Physics I AND PHYS 1402*[3] General Physics II	6	
<b>CORE 90</b> ENGL 1302* Research and Rhetoric OR ENGL 2311* Introduction to Professional and Technical Communication	3	
<b>CORE 90</b> PHYS 1401L[1], PHYS 1402L[1] and Fourth hour from Life and Physical Sciences (e.g., CHEM 1411L), or IDS 1071	3	
<b>SCIENCE REQUIREMENTS: 53-60 HOURS</b> (A grade of "C" or better and a 2.75 GPA is required. ^)		
BIOL 1411, 1411L Botany AND BIOL 1413, 1413L Zoology	8	
BIOL 2420*, 2420L Applied Microbiology OR BIOL 2572*, 2572L Microbiology	4-5	
BIOL 3301 Genetics	3	
BIOL 3440, 3440L Anatomy and Physiology of Humans	4	
BIOL 4310, 4210L General Ecology	5	
<b>Choose one course from two separate areas:</b>		
<b>Area One:</b> BIOL 3420, 3420L Natural History of Vertebrates BIOL 4431, 4431L Ichthyology BIOL 4432, 4432L Herpetology		cont. →

**Bachelor of Science Degree**  
**Major: Biology**  
**BS.SCIENCE.EDS (446) – TExES Exams: 160, 236**

BIOL 4433, 4433L Ornithology BIOL 4434, 4434L Mammalogy		
<b>Area Two:</b> BIOL 3331 Parasitology BIOL 3311* Arthropods and Public Health BIOL 3510, 3510L Entomology BIOL 4460, 4460L Arachnology		6-10
<b>Area Three:</b> BIOL 3385 Marine Biology BIOL 3304* Evolution BIOL/GEOL 3406*, 3406L Paleontology BIOL 3532*, 3532L Plant Classification BIOL 4335 Animal Behavior BIOL 4351* Conservation Biology BIOL 4425, 4425L Limnology		
CHEM 1411*, 1411L Chemistry I	4	
CHEM 1412*, 1412L Chemistry II	4	
CHEM 2533*, 2533L Elementary Organic Chemistry	5	
GEOG 1401, 1401L Earth Science I	4	
GEOG 1402, 1402L Earth Science II OR GEOG/GESC 3313 Meteorology	3-4	
PHYS 1411, 1411L Planetary Astronomy OR GESC 3310*, 3310L Minerals and Rocks	3-4	
<b>OTHER DEGREE REQUIREMENTS: 3-4 HOURS</b>		
<b>Take one of the following:</b> MATH 1316* Plane Trigonometry MATH 1342 Elementary Statistical Methods MATH 2412* Pre-Calculus Math OR MATH 3360* Statistical Methods	3-4	
<b>EDUCATION REQUIREMENTS: 27 HOURS</b> (A grade of "C" or better and a 2.75 GPA is required. ^)		
EPSY 4341 Educator Readiness and Performance	3	
EDPD 4340* Classroom Management	3	
EDRD 4386 Secondary Reading in Content Area	3	
EDPD 4330* Educational Methodology & Diverse	3	
EDPD 4348 Data-Informed Instruction and Assessment	3	
EDPD 4398 Clinical Teaching – All Certificate Areas	3	
EDSE 4341* Clinical Teaching - Secondary	3	
EPSY 3341* Educational Psychology	3	
EPSY 3350 Children with Special Needs	3	
<b>MINIMUM HOURS REQUIRED TO COMPLETE DEGREE</b>	<b>121</b>	

\* Indicates prerequisites—see catalog for more information.  
 \*\* Or an equivalent course (second year, second semester) in a foreign language.  
 ^Transfer & WT GPA combined must be 2.75.

**NOTE: This is NOT a degree plan. All undergraduate students must request an official degree plan from their academic dean's office by the time they have completed 30 credit hours.**

**WTAMU ADVISING SERVICES – 2023-2024 Curriculum Guide**

**Major: Science (7-12) Cert. – Biology, B.S.**

**Major Code: 446**

<b>Year 1: Fall</b>	
CORE 10 (Communication) – ENGL 1301 or 1311	3
CORE 20 (Mathematics) – MATH 1314	3
BIOL 1411/1411L Botany	4
CORE – See checklist for options <sup>1</sup>	3
CORE – See checklist for options <sup>1</sup>	3
<b>Total:</b>	<b>16</b>

<b>Year 1: Spring</b>	
CORE 30 (Life & Phys. Sci.) – PHYS 1401 General Physics I	3
CORE 90 (Component Area Option) – PHYS 1401L	1
CORE 90 (Component Area Option) – ENGL 1302, 1312 or 2311	3
BIOL 1413/1413L Zoology	4
CORE – See checklist for options <sup>1</sup>	3
CORE – See checklist for options <sup>1</sup>	3
<b>Total:</b>	<b>17</b>

<b>Year 2: Fall</b>	
CORE 30 (Life & Phys. Sci.) – PHYS 1402 General Physics II	3
CORE 90 (Component Area Option) – PHYS 1402L	1
CHEM 1411/1411L Chemistry I	4
MATH 1316, 1342, 2412 or 3360	3-4
CORE – See checklist for options <sup>1</sup>	3
<b>Total:</b>	<b>14-15</b>

<b>Year 2: Spring</b>	
CHEM 1412/1412L Chemistry II	4
BIOL 2420/2420L <b>or</b> 2572/2572L	4-5
BIOL 3301 Genetics	3
GEOL 1402/1402L or GEOG/GESC 3313	3-4
CORE – See checklist for options <sup>1</sup>	3
<b>Total:</b>	<b>17-18</b>

<b>Year 3: Fall</b>	
CHEM 2533 Elementary Organic Chemistry	5
PHYS 1411/1411L Planetary Astronomy <b>or</b> GESC 3310 Minerals and Rocks	3-4
EPSY 3350 Children with Special Needs	3
Choose one from Area 1, 2, or 3 <sup>2</sup>	3-5
CORE – See checklist for options <sup>1</sup>	3
<b>Total:</b>	<b>17-18</b>

<b>Year 3: Spring</b>	
BIOL 3340/3340L Reproductive Physiology	3
EDRD 4386 Secondary Reading in the Content Area	3
EPSY 3341 Educational Psychology	3
EDPD 4330 Educational Methodology & Diverse Learners	3
Choose one from Area 1, 2, or 3 <sup>2</sup>	3-5
<b>Total:</b>	<b>15-17</b>

<b>Year 4: Fall</b>	
BIOL 4310 General Ecology <b>and</b> BIOL 4210L Gen. Ecology Lab	5
EPSY 4341 Educator Readiness and Performance	3
EDPD 4340 Classroom Management	3
EDPD 4348 Data-Informed Instruction and Assessment	3
CORE – See checklist for options <sup>1</sup>	3
<b>Total:</b>	<b>17</b>

<b>Year 4: Spring</b>	
EDPD 4398 Clinical Teaching – All Certificate Areas	3
EDSE 4341 Clinical Teaching - Secondary	3
<b>Total:</b>	<b>6</b>

<sup>1</sup> **CORE:** Science (7-12) Cert. majors are required to take specific courses for Core 20, Core 30, and Core 90. For all other categories, they may select from any available options (see degree checklist). Apart from the major-specific core requirements, there is no set order in which core courses must be taken.

<sup>2</sup> **Choose two courses from TWO separate areas:**

- AREA 1: BIOL 3420, 4431, 4432, 4433, 4434
- AREA 2: BIOL 3331, 3311, 3510, 4460
- AREA 3: BIOL 3385, 3304, 3406 (or GEOL 3406), 3532, 4335, 4351, 4425

<b>Identified Marketable Skills</b>	<b>Top Three Local Employers or Industries/Professional Programs/Possible Career Opportunities</b>
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**Additional notes:**

- The core curriculum must total exactly 42 hours; excess hours must be moved to the major as an elective or a major requirement and stay within the 120-hour requirement or approved total submitted to the Coordinating Board for degree requirements. Some majors specify particular courses to meet core curriculum requirements when options are available.
- At least 36 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU. A maximum of six semester hours in religion (RELI) and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

DISCLAIMER: This curriculum guide should be used in conjunction with the corresponding degree checklist for general planning purposes only. The degree checklist (later a student's official degree plan) should be referred to as the comprehensive list of all courses required for the degree. An official degree plan is required after completing 30 hours. Students should always seek the advice of their academic adviser before scheduling classes.