West Texas A&M University
Advising Services
Degree Checklist
2026-2027

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

NAME:_____ **WT ID:**_____ **DATE:**_____

Science (Grades 7-12) Certification
Department of Natural Sciences
NSB 106 (806) 651-2940

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

CORE CURRICULUM COURSES: 42 HOURS ♦	HRS	
Communication (Core 10)		
ENGL 1301 Intro. to Academic Writing & Argumentation **OR** ENGL 1311 Writing About Ideas	3	
COMM 1315, 1318, or 1321	3	
Mathematics (Core 20)		
See **University Core Requirements** below	(3)	
Life and Physical Sciences (Core 30)		
See **University Core Requirements** below	(6)	
Language, Philosophy and Culture (Core 40)		
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	
Creative Arts (Core 50)		
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 **Choose 1**	3	
American History (Core 60)		
HIST 1301, 1302, 2301, 2381, 2382 **Choose 2**	6	
Government/Political Science (Core 70)		
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Core 80)		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; GEOG 1302; PSYC 2301; SOCI 1301 **Choose 1**	3	
Component Area Option (Core 90)		
See **University Core Requirements** below	(6)	
SCIENCE (GRADES 7-12) CERTIFICATION REQUIREMENTS: 96-102 HOURS **A grade of "C" or better and a 2.75 GPA is required.^**		
UNIVERSITY CORE REQUIREMENTS: 15 HOURS		
CORE 20 MATH 1314* College Algebra	3	
CORE 30 PHYS 1401*[3] General Physics I **AND** PHYS 1402*[3] General Physics II	6	
CORE 90 ENGL 1302* Academic Writing & Research **OR** ENGL 2311* Intro. to Professional & Technical Comm.	3	
CORE 90 PHYS 1401L[1], PHYS 1402L[1] **AND** Fourth hour from other Core 30 course, or IDS 1071	3	
SCIENCE REQUIREMENTS: 51-56 HOURS **(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 3340*, 3340L Reproductive Physiology	3	
BIOL 4310, 4210L General Ecology	5	

Choose one course from two separate areas: **Area One:** BIOL 3420, 3420L Natural History of Vertebrates; BIOL 4431, 4431L Ichthyology; BIOL 4432*, 4432L Herpetology; BIOL 4433*, 4433L Ornithology; BIOL 4434*, 4434L Mammalogy **Area Two:** BIOL 3311* Arthropods and Public Health; BIOL 3331 Parasitology; BIOL 3510, 3510L Entomology; BIOL 4460, 4460L Arachnology **Area Three:** BIOL 3304* Evolution; BIOL 3385 Marine Biology; BIOL/GEOL 3406*, 3406L Paleontology; BIOL 3532*, 3532L Plant Classification; BIOL 4335 Animal Behavior; BIOL 4351* Conservation Biology; BIOL 4425, 4425L Limnology	6-10	
CHEM 1411*, 1411L Chemistry I	4	
CHEM 1412*, 1412L Chemistry II	4	
CHEM 2533*, 2533L Elementary Organic Chemistry	5	
GEOL 1301, 1301L Earth Science I	3	
GEOL 1302, 1302L Earth Science II **OR** GEOG/GESC 3313 Meteorology	3	
PHYS 1311, 1311L Planetary Astronomy **OR** GESC 3310*, 3310L Minerals and Rocks	3	
OTHER DEGREE REQUIREMENTS: 3-4 HOURS		
Take one of the following: MATH 1316* Plane Trigonometry **OR** MATH 1342 Elementary Statistical Methods **OR** MATH 2412* Pre-Calculus Math **OR** MATH 3360* Statistical Methods	3-4	
EDUCATION REQUIREMENTS: 27 HOURS **(A grade of "C" or better and a 2.75 GPA is required.^)**		
EPSY 3341* Educational Psychology	3	
EPSY 3350 Children with Special Needs	3	
EPSY 4341* Educator Readiness and Performance	3	
EDPD 4330* Educational Methodology & Diverse	3	
EDPD 4340* Classroom Management	3	
EDPD 4348 Data-Informed Instruction and Assessment	3	
EDRD 4386 Secondary Reading in Content Area	3	
EDPD 4398* Clinical Teaching – All Certificate Areas	3	
EDSE 4341* Clinical Teaching - Secondary	3	
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE	**123**	

* 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 – 2026-2027 Curriculum Guide

Major: Science (7-12) Certification – Biology, B.S. BS.SCIENCE.EDS (446)

Year 1: Fall	
CORE 10 (Communication) – ENGL 1301 or 1311	3
CORE 20 (Mathematics) – MATH 1314	3
CORE 60 (American History) – See checklist for options[1]	3
CORE 70 (Govt./Political Sci.) – POSC 2306	3
CORE 90 (Comp. Area Opt.) – IDS 1071	1
BIOL 1411/1411L Botany	4
Total:	17

Year 1: Spring	
CORE 30 (Life & Phys. Sci.) – PHYS 1401/1401L General Phys. I **(4th hour goes toward Core 90)**	4
CORE 50 (Creative Arts) – See checklist for options[1]	3
CORE 60 (American History) – See checklist for options[1]	3
CORE 90 (Comp. Area Opt.) – ENGL 1302 or 2311	3
BIOL 1413/1413L Zoology	4
Total:	17

Year 2: Fall	
CORE 30 (Life & Phys. Sci.) – PHYS 1402/1402L General Phys. I **(4th hour goes toward Core 90)**	4
CORE 70 (Govt./Political Sci.) – POSC 2305	3
MATH 1316, 1342, 2412 or 3360	3-4
CHEM 1411/1411L Chemistry I	4
GEOL 1301/1301L Earth Science I	3
Apply to EPP (Educator Preparation Program)	
Total:	17-18

Year 2: Spring	
BIOL 2420/2420L **or** BIOL 2572/2572L	4-5
BIOL 3301 Genetics	3
CHEM 1412/1412L Chemistry II	4
GEOL 1302/1302L **or** GEOG/GESC 3313	3
EPSY 3341 Educational Psychology	3
Total:	17-18

Year 3: Fall	
CORE 40 (Lang., Phil. & Culture) – See checklist for options[1]	3
CHEM 2523 Elementary Organic Chemistry	5
PHYS 1311/1311L Planetary Astronomy **or** GESC 3310 Minerals and Rocks	3
Choose one course from Area 1, 2 or 3[2]	3-5
EDPD 4330 Educational Methodology & Diverse Learners	3
Total:	17-18

Year 3: Spring	
BIOL 3340/3340L Reproductive Physiology	3
Choose one course from Area 1, 2 or 3[2]	3-5
EDPD 4348 Data-Informed Instruction and Assessment	3
EDRD 4386 Secondary Reading in the Content Area	3
EPSY 4341 Educator Readiness and Performance	3
Total:	15-17

Year 4: Fall	
CORE 10 (Communication) – COMM 1315, 1318 or 1321	3
CORE 80 (Soc. & Behav. Sci.) – See checklist for options[1]	3
BIOL 4310/4210L General Ecology	5
EDPD 4340 Classroom Management	3
EPSY 3350 Children with Special Needs	3
Electives – As needed to meet the 120 hours requirement	TBD
Total:	17+

Year 4: Spring	
EDPD 4398 Clinical Teaching – All Certificate Areas	3
EDSE 4341 Clinical Teaching – Secondary	3
Total:	6

[1] **CORE:** Science (7-12) Certification 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.

[2] **Choose two courses from TWO separate areas. At least two must have labs.**

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

Identified Marketable Skills	Top Three Local Employers or Industries/Professional Programs/Possible Career Opportunities

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.