

**AS- General Studies - Biology to  
Bachelor in Science in Biomedical Science –  
Pre-Pharmacy Concentration †  
Guided Pathway  
Effective for the 2019-2020 Catalog**

**First Year – North Central Texas College**

FIRST SEMESTER	SECOND SEMESTER
ENGL 1301 Composition I	ENGL 2311 Technical Writing
HIST 1301 US History I	HIST 1302 or 2301 US History II or Texas History
EDUC 1300 Learning Frameworks	MATH 2413 Calculus I*
BIOL 1406-Biology for Science majors I	BIOL 1407 Biology for Science majors II
MATH 2412 Pre-Calculus	MUSI 1306 or other Creative Arts Core

Total Semester Hours: 17

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**Second Year – North Central Texas College**

It's best to apply to Tarleton State University a full semester before you plan to transfer.

FIRST SEMESTER	SECOND SEMESTER
GOVT 2305 American National Government	GOVT 2306 Texas Government
SPCH 1311, 1315, or 1321	CHEM 1412 General Chemistry II*
PHYS 1401 College Physics or PHYS 2425 University Physics I*	PHIL 1301 – Introduction to Philosophy
CHEM 1411 General Chemistry I*	Elective PHYS 1402 College Physics II or PHYS 2426 University Physics II*
ECON 2301 - Principles of Macroeconomics	

Total Semester Hours: 17

Total Semester Hours: 14

**Associates of Science – General Studies- Biology Major**

You will need to apply for the associate's degree at your community college. Contact your advisor there for more information.

**These courses may be completed at NCTC or TSU**

CHEM 2425 - Organic Chemistry II (CHEM 2325+1125)	CHEM 2423 – Organic Chemistry I (CHEM 2323 + 2123)
Elective	Elective

Total Semester Hours: 14

**Third Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
BIOL 2300 – Cell Biology	BIOL 3407 – Microbiology
BIOL 3303 – Genetics	BIOL 1185 – Career Pathways in Biomedical Science
BIOL 3103 – Genetic Techniques	MATH 3450 – Principles of Bio-Statistics
BIOL 3406 – Comparative Vertebrate Anatomy	BIOL 4374 (Fall Only) – Biochemistry I

Total Semester Hours: 11

Total Semester Hours: 12

**Fourth Year – Tarleton State University**

FIRST SEMESTER	SECOND SEMESTER
BIOL 4460 – Animal Physiology	BIOL 3380, 3395, 3402 (Summer Only), 3413, 3485, 4340, 4350, 4445, 4375 (Spring Only), or 4378 (Spring Only)
BIOL 3353 – Ecology and Evolution	BIOL 3380, 3395, 3402 (Summer Only), 3413, 3485, 4340, 4350, 4445, 4375 (Spring Only), or 4378 (Spring Only)
BIOL 4185 – Seminar (Spring Only)	BIOL 4398 – Current Topics in the Life Sciences
	ENGL 3309 – Technical Writing and Document Design

Total Semester Hours: 8

Total Semester Hours: 11-14

TOTAL: 121

**This is not an official degree plan. Check with an advisor; degree plans may change in later catalogs.**

Part-time students may also follow this sequence. Developmental coursework may be required.

\*MATH 1314 is a prerequisite to CHEM 1411, and MATH 1314 along with either MATH 1316 or 2412 are prerequisites to MATH 2413 and PHYS 1401 or 2425. Until you have completed these prerequisites you will be under a General Studies major (AA or AS degree). Some Math prerequisites may be satisfied by earning required scores on CLEP, AP, IB, ACT, SAT, or an NCTC approved Math placement exam. Please see an advisor at NCTC for details.

() Course numbers shown in parentheses are equivalent to these courses at Tarleton State University.

† Degree availability varies by campus; consult [www.tarleton.edu](http://www.tarleton.edu) for more information.