



# Texarkana College

## Texas High School Early Enrollment Pathway Plan

### Associate of Science Degree

Major: Chemistry

Student Name \_\_\_\_\_ TC ID# \_\_\_\_\_

Academic Coach for Dual Credit (AC/DC) \_\_\_\_\_

TSIA2 Eng \_\_\_\_\_ TSIA2 Math \_\_\_\_\_ ACT \_\_\_\_\_

Advising Dates: \_\_\_\_\_

| TC Course                      | Course Title                                                                                                                                                                                                       | Credit Hours | Grade Level Completed | Grade Level Course is Available | Comments/Planning                                                         |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------|---------------------------------|---------------------------------------------------------------------------|
| CORE COURSES                   |                                                                                                                                                                                                                    |              |                       |                                 |                                                                           |
| ENGL 1301                      | Composition I <sup>1</sup>                                                                                                                                                                                         | 3            |                       | 12 or *EA                       |                                                                           |
| ENGL 1302<br>OR<br>ENGL 2311   | Composition II <sup>1</sup><br>OR<br>Technical & Business Writing <sup>1</sup>                                                                                                                                     | 3            |                       | 12 or *EA                       |                                                                           |
| EDUC/PSYC 1300                 | Learning Frameworks <sup>9</sup>                                                                                                                                                                                   | 3            |                       | 9, 10, 11, 12 or *EA            |                                                                           |
| HIST 1301                      | United States History I <sup>6</sup>                                                                                                                                                                               | 3            |                       | 11 or *EA                       |                                                                           |
| HIST 1302                      | United States History II <sup>6</sup>                                                                                                                                                                              | 3            |                       | 11 or *EA                       |                                                                           |
| XXXX xxxx                      | Creative Arts Elective <sup>5</sup>                                                                                                                                                                                | 3            |                       | 9, 10, 11, 12 or *EA            |                                                                           |
| XXXX xxxx                      | Social & Behavioral Science <sup>8</sup>                                                                                                                                                                           | 3            |                       | 10, 11, 12 or *EA               | Grade level pending course                                                |
| XXXX xxxx                      | Any core Speech or see 9A on next page                                                                                                                                                                             | 3            |                       | *EA                             | Speech recommended                                                        |
| XXXX xxxx                      | ENGL 2327/2328 American Literature I/II <sup>4</sup><br>ENGL 2332/2333 World Literature I/II <sup>4</sup><br>HIST 2321/2322 World Civilizations I/II <sup>4</sup><br>PHIL 2306 Introduction to Ethics <sup>4</sup> | 3            |                       | 10, 11, 12 or *EA               |                                                                           |
| GOVT 2305                      | Federal Government <sup>7</sup>                                                                                                                                                                                    | 3            |                       | 12 or *EA                       |                                                                           |
| GOVT 2306                      | Texas Government <sup>7</sup>                                                                                                                                                                                      | 3            |                       | 11, 12 or *EA                   |                                                                           |
| CHEM 1311                      | General Chemistry I <sup>12</sup>                                                                                                                                                                                  | 3            |                       | 11, 12 or *EA                   |                                                                           |
| PHYS 1301<br>OR<br>PHYS 2325   | College Physics I <sup>12</sup><br>OR<br>University Physics 1 <sup>12</sup>                                                                                                                                        | 3            |                       | *EA                             |                                                                           |
| MATH 2413                      | Calculus 1 <sup>12</sup>                                                                                                                                                                                           | 4            |                       | *EA                             |                                                                           |
| TOTAL CORE HOURS               |                                                                                                                                                                                                                    | 43           |                       |                                 |                                                                           |
| ADDITIONAL COURSES FOR DEGREE  |                                                                                                                                                                                                                    |              |                       |                                 |                                                                           |
| CHEM 1111                      | General Chemistry I Lab <sup>12</sup>                                                                                                                                                                              | 1            |                       | 11, 12 or *EA                   |                                                                           |
| PHYS 1101<br>OR<br>PHYS 2125   | College Physics I Lab <sup>12</sup><br>OR<br>University Physics I Lab <sup>12</sup>                                                                                                                                | 1            |                       | *EA                             |                                                                           |
| CHEM 1312                      | General Chemistry II <sup>12</sup>                                                                                                                                                                                 | 3            |                       | *EA                             |                                                                           |
| CHEM 1112                      | General Chemistry II Lab <sup>12</sup>                                                                                                                                                                             | 1            |                       | *EA                             |                                                                           |
| *PHYS 1302<br>OR<br>*PHYS 2326 | College Physics II <sup>12</sup><br>OR<br>University Physics II <sup>12</sup>                                                                                                                                      | 3            |                       | *EA                             | *PHYS 1102 lab or PHYS 2126 lab recommended for college transfer purposes |
| CHEM 2323                      | Organic Chemistry I <sup>12</sup>                                                                                                                                                                                  | 3            |                       | *EA                             |                                                                           |
| CHEM 2123                      | Organic Chemistry I Lab <sup>12</sup>                                                                                                                                                                              | 1            |                       | *EA                             |                                                                           |
| CHEM 2325                      | Organic Chemistry II <sup>12</sup>                                                                                                                                                                                 | 3            |                       | *EA                             |                                                                           |
| CHEM 2125                      | Organic Chemistry II Lab <sup>12</sup>                                                                                                                                                                             | 1            |                       | *EA                             |                                                                           |
| TOTAL NON-CORE HOURS           |                                                                                                                                                                                                                    | 17           |                       |                                 |                                                                           |
| Total Credit Hours             |                                                                                                                                                                                                                    | 60           |                       |                                 |                                                                           |

Many courses have pre-requisite or co-requisites and/or TSI requirements that must be met. Check course descriptions in the TC Catalog. Students planning to transfer to a four-year institution should check degree requirements of the college or university to which they plan to transfer.

\*Course offered through TC's Early Admission program.

## Explanation for Superscripts

|           |                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                                                                                                                                                                                                                                                             |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>  | <b>Communication Block (010):</b><br>Complete each of the following: ENGL 1301 <b>and</b> ENGL 1302 or 2311                                                                                                                                                                                                                                                                                                      | <b>2</b>  | <b>Mathematics Block (020):</b><br>Complete one of the following: MATH 1314, 1316, 1324, 1325, 1332, 1350, 1442, 2412, or 2413                                                                                                                              |
| <b>3</b>  | <b>Life &amp; Physical Sciences Block (030):</b><br>Complete two of the following: BIOL 1306, 1307, 1308, 1309, 1311, 1313, 1322, 2301, 2302, 2306, 2320, 2321; CHEM 1305, 1307, 1311, 1312, 1419; GEOL 1303; PHYS 1301, 1303, 1304, 1315, 2325                                                                                                                                                                  | <b>4</b>  | <b>Language, Philosophy, &amp; Culture Block (040):</b><br>Complete one of the following: ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2341; HIST 2321, 2322; PHIL 2306                                                                                         |
| <b>5</b>  | <b>Creative Arts Block (050):</b><br>Complete one of the following: ARTS 1301, 1310; DRAM 1310, 2366; MUSI 1306                                                                                                                                                                                                                                                                                                  | <b>6</b>  | <b>American History Block (060):</b><br>Complete each of the following: HIST 1301 <b>and</b> 1302                                                                                                                                                           |
| <b>7</b>  | <b>Government/Political Science Block (070):</b><br>Complete each of the following: GOVT 2305 <b>and</b> 2306                                                                                                                                                                                                                                                                                                    | <b>8</b>  | <b>Social &amp; Behavioral Sciences Block (080):</b> Complete one of the following: COMM 1307; ECON 2301, 2302; GEOG 1303; PSYC 2301, 2308, 2314; SOCI 1301                                                                                                 |
| <b>9</b>  | <b>Component Area Option Block (090): 9A: Choose one from the following:</b><br>SPCH 1315; SPCH 1318; SPCH 1321<br><b>OR</b> any courses in Component Areas (010), (020), (030), (040), (050), & (080) that are not used to fulfill another core requirement except MATH 2413, which is listed below.<br><br><b>AND</b><br><br><b>9B: Choose one from the following:</b><br>BCIS 1305; MATH 2413; PSYC/EDUC 1300 | <b>10</b> | <b>Lab Science Course</b><br>Choose a lab science course that corresponds to the Life & Physical Sciences courses you take: BIOL 1106, 1107, 1108, 1109, 1111, 1113, 2101, 2102, 2120, 2121; CHEM 1105, 1107, 1111, 1112; PHYS 1101, 1103, 1104, 1115, 2125 |
| <b>11</b> | <b>Elective Option:</b><br>Choose any college level course                                                                                                                                                                                                                                                                                                                                                       | <b>12</b> | <b>Degree Requirement</b><br>This course is required for this particular degree                                                                                                                                                                             |

## LEARNING OUTCOMES/MARKETABLE SKILLS

Critical Thinking | Teamwork | Communication | Empirical & Quantitative Reasoning | Technical Proficiency | Numeracy | Organization Self-Discipline | Time Management | Leadership | Independent Learning Skills

## EDUCATIONAL OPPORTUNITIES

B.S. Chemistry | B.S. Science Education | B.S. Environmental Chemistry | B.S. Medical Technology | B.S. Forensic Science | B.S. Biology | B.S. Biochemistry | B.S. Chemical Engineering

## CAREER OPPORTUNITIES (B.S. or Higher)

Analytical Chemist | Chemical Engineer | Clinical Biochemist | Forensic Scientist | Pharmacologist | Chemistry Teacher

## HIGH SCHOOL ENDORSEMENTS

STEM | Public Health | Business & Industry | Multi-Disciplinary

## LINKS TO COLLEGES & PROFESSIONAL ORGANIZATIONS:

Texas A&M Texarkana Department of Chemistry: <http://www.tamut.edu/Academics/Colleges-and-Departments/STEM/Chemistry/index.html>

Stephen F. Austin State University Department of Chemistry and Biochemistry: <http://www.sfasu.edu/chemistry/>

University of North Texas Department of Chemistry: <https://chemistry.unt.edu/>

Southern Arkansas University Department of Chemistry and Biochemistry: <https://web.saumag.edu/science/biochemistry-chemistry/>

American Chemical Society: <https://www.acs.org/content/acs/en.html>