

**CURRICULUM SUMMARY FOR THE BACHELOR OF SCIENCE IN  
CHEMISTRY  
PRE-MEDICAL AND PRE-DENTAL CONCENTRATION  
TOTAL CREDITS REQUIRED:122**

| CORE CURRICULUM (STANDARD)*               |                        | MAJOR<br>(CHEMISTRY) | OTHER<br>REQUIREMENTS | MINOR<br>REQUIREMENTS |
|---|------------------------|----------------------|-----------------------|-----------------------|
| TSU COURSES                               | TCCNS EQUIVALENT       |                      |                       |                       |
| 42 credits                                |                        | 37 credits           | 43 credits            | 0 credits             |
| <u>Communication:</u>                     |                        | CHEM 111 (1)         | BIOL 131 (3)          |                       |
| ENG 131 (3) **                            | ENGL 1301              | CHEM 112 (1)         | BIOL 111 (1)          |                       |
| ENG 132 (3)                               | ENGL 1302              | CHEM 231 (3)         | BIOL 132 (3)          |                       |
| <u>Mathematics:</u>                       |                        | CHEM 211 (1)         | BIOL 112 (1)          |                       |
| MATH 136 (3)                              | MATH 2312              | CHEM 232 (3)         | BIOL 231 (3)          |                       |
| <u>Life and physical sciences:</u>        |                        | CHEM 212 (1)         | BIOL 211 (1)          |                       |
| CHEM 131 (3)                              | CHEM 1311              | CHEM 332 (3)         | BIOL 245 (4)          |                       |
| CHEM 132 (3)                              | CHEM 1312              | CHEM 322 (2)         | BIOL 460 (3)          |                       |
| <u>Language, philosophy, and culture:</u> |                        | CHEM 431 (3)         | CS 117 (3)            |                       |
| ENG 2xx (3) ***                           |                        | CHEM 411 (1)         | MATH 241 (4)          |                       |
| <u>Creative arts:</u>                     |                        | CHEM 432 (3)         | MATH 242 (4)          |                       |
| Creative Arts Course (3) ****             |                        | CHEM 412 (1)         | PHYS 237 (3)          |                       |
| <u>American history:</u>                  |                        | CHEM 445 (4)         | PHYS 213 (1)          |                       |
| HIST 231 (3)                              | HIST 1301              | CHEM 450 (3)         | PHYS 238 (3)          |                       |
| HIST 232 (3)                              | HIST 1302              | CHEM 451 (3)         | PHYS 214 (1)          |                       |
| <u>Government/political science:</u>      |                        | CHEM 453 (3)         |                       |                       |
| POLS 235 (3)                              | GOVT 2305              | CHEM 499 (1)         | Elective (4)          |                       |
| POLS 236 (3)                              | GOVT 2306              |                      | FS 102 (1)            |                       |
| <u>Social and behavioral sciences:</u>    |                        |                      |                       |                       |
| PSY 131 (3) or SOC 157 (3)                | PSYC 2301 or SOCI 1301 |                      |                       |                       |
| <u>Institutional Options:</u>             |                        |                      |                       |                       |
| SC 135 or SC 136 (3)                      | SPCH 1321 or SPCH 1315 |                      |                       |                       |
| CS 116 (3)                                | COSC 1301              |                      |                       |                       |
|   |                        |                      |                       |                       |
|   |                        |                      |                       |                       |
|   |                        |                      |                       |                       |
|   |                        |                      |                       |                       |
|   |                        |                      |                       |                       |
|   |                        |                      |                       |                       |

\* Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed

\*\* (N) represents the number of course credits.

\*\*\* ENG 230, ENG 231, ENG 235, or ENG 244 (TCCN: ENGL 2332, ENGL 2333, ENGL 2326, or ENGL 2326)

\*\*\*\* MUSI 136, MUSI 239, THEA 130, ART 135, or ART 137 (TCCN: MUSI 1306, HUMA 1315, DRAM 1310, ARTS 1301, or HUMA 2323)

**BACHELOR OF SCIENCE IN  
CHEMISTRY  
PRE-MEDICAL AND PRE-DENTAL CONCENTRATION  
TOTAL CREDITS: 122**

| First Year | FIRST SEMESTER                     |               | SECOND SEMESTER                         |               |
|------------|------------------------------------|---------------|---|---------------|
|            | CHEM 131 General Chemistry I Lec   | 3             | CHEM 132 General Chemistry II Lec       | 3             |
|            | CHEM 111 General Chemistry I Lab   | 1             | CHEM 112 General Chemistry II Lab       | 1             |
|            | BIOL 131 Biological Science I Lec  | 3             | BIOL 132 Biological Science II Lec      | 3             |
|            | BIOL 111 Biological Science I Lab  | 1             | BIOL 112 Biological Science II Lab      | 1             |
|            | ENG 131 Freshman English I *       | 3             | ENG 132 Freshman English II             | 3             |
|            | MATH 136 Precalculus Mathematics * | 3             | MATH 241 Calculus & Analytic Geometry I | 4             |
|            | FS 102 Freshman Seminar            | 1             |   |               |
|            |                                    | <b>15 Hrs</b> |   | <b>15 Hrs</b> |

| Second Year | THIRD SEMESTER   |               | FOURTH SEMESTER   |               |
|-------------|--|---------------|---|---------------|
|             | CHEM 231 Organic Chemistry I Lec                                 | 3             | CHEM 232 Organic Chemistry II Lec                                   | 3             |
|             | Chem 211 Organic Chemistry I Lab                                 | 1             | Chem 212 Organic Chemistry II Lab                                   | 1             |
|             | ENG 2XX Upper Level English                                      | 3             | Elective  | 3             |
|             | MATH 242 Calculus & Analytic Geometry, II                        | 4             | CS 117 Computer Science II Lec                                      | 3             |
|             | CS 116 Computer Science I Lec                                    | 3             | HIST 232 Social & Political History of the United States since 1877 | 3             |
|             | HIST 231 Social & Political History of the United States to 1877 | 3             | Creative Arts Course **   | 3             |
|             |  | <b>17 Hrs</b> |   | <b>16 Hrs</b> |

| Third Year | FIFTH SEMESTER                     |   | SIXTH SEMESTER                  |   |
|------------|------------------------------------|---|---------------------------------|---|
|            | CHEM 332 Quantitative Analysis Lec | 3 | CHEM 445 Biochemistry Lec       | 4 |
|            | CHEM 322 Quantitative Analysis Lab | 2 | POLS 236 Texas Government       | 3 |
|            | POLS 235 American Government       | 3 | PHYS 214 College Physics II Lab | 1 |
|            | PHYS 213 College Physics I Lab     | 1 | PHYS 238 College Physics II Lec | 3 |
|            | PHYS 237 College Physics I Lec     | 3 | BIOL 211 Cell Biology Lab       | 1 |
|            | PSY 131 Intro to Psychology ***    | 3 | BIOL 231 Cell Biology Lec       | 3 |
|            |                                    |   | CHEM 499 Seminar                | 1 |
|            | <b>15 Hrs</b>                      |   | <b>16 Hrs</b>                   |   |

| Fourth Year | SEVENTH SEMESTER  |               | EIGHTH SEMESTER                     |               |
|-------------|---|---------------|-------------------------------------|---------------|
|             | CHEM 431 Physical Chemistry I Lec                                     | 3             | CHEM 432 Physical Chemistry II Lec  | 3             |
|             | CHEM 411 Physical Chemistry I Lab                                     | 1             | CHEM 412 Physical Chemistry II Lab  | 1             |
|             | CHEM 450 Inorganic Chemistry I  | 3             | CHEM 451 Inorganic Chemistry II     | 3             |
|             | BIOL 460 Biostatistics  | 3             | CHEM 453 Instrumental Analysis      | 3             |
|             | Elective  | 1             | BIOL 245 Human Anatomy & Physiology | 4             |
|             | SC 135 or 136 Business & Professional Communication or Public Address | 3             |                                     |               |
|             |   | <b>14 Hrs</b> |                                     | <b>14 Hrs</b> |

\* Pending acceptable scores on English and Math Placement Exams.

\*\* MUSI 136, MUSI 239, THEA 130, ART 135, or ART 137 (TCCN: MUSI 1306, HUMA 1315, DRAM 1310, ARTS 1301, or HUMA 2323)

\*\*\* PSY 131, SOC 157, SOC 158, SOC 221, SOC 238, ECON 231 or ECON 232