## College of Science

**B.S. Biochemistry, Secondary Education Certification in Chemistry Grades (7-12)**

2019-2020 Texas Common Course Numbering System Transfer Guide

This four-year plan provides a model for on-time completion of this UNT program using as many TCCNS courses as possible. The four-year plan also shows the first point when no TCCNS options are available for this program. See the current [Undergraduate Catalog](http://registrar.unt.edu/transfer-guides) for course prerequisites. Course availability at UNT is subject to change, and the plan shown below may change based on updates to UNT’s course offerings.

UNT courses noted (#) do not have TCCNS equivalents, but have approved transferable substitutions.

### UNT Core: Social & Behavioral Sciences

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>UNT Requirement</td>
<td>TCCNS Option</td>
</tr>
<tr>
<td></td>
<td>UNT Core: Social &amp; Behavioral Sciences</td>
<td>See list of approved courses</td>
</tr>
<tr>
<td></td>
<td>TNTX 1100* (1 hr)</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>CHEM 1410/1430</td>
<td>CHEM 1411 or 1311/1111</td>
</tr>
<tr>
<td></td>
<td>BIOL 1710/1760#</td>
<td>BIOL 1406 or 1306/1106</td>
</tr>
<tr>
<td></td>
<td>MATH 1650</td>
<td>MATH 2312 or 2412</td>
</tr>
</tbody>
</table>

* Students must be admitted to Teach North Texas Program prior to enrolling in certain Education courses.

### UNT Core: Creative Arts

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore</td>
<td>UNT Requirement</td>
<td>TCCNS Option</td>
</tr>
<tr>
<td></td>
<td>MATH 1720</td>
<td>MATH 2314 or 2414</td>
</tr>
<tr>
<td></td>
<td>CHEM 2370/3210#</td>
<td>CHEM 2423 or 2323/2123</td>
</tr>
<tr>
<td></td>
<td>PSCI 2305</td>
<td>GOVT 2305</td>
</tr>
<tr>
<td></td>
<td>TECM 2700</td>
<td>ENGL 2311</td>
</tr>
<tr>
<td></td>
<td>PHYS 1510#/1530# or PHYS 1710/1730</td>
<td>PHYS 2425 or 2325/2125</td>
</tr>
</tbody>
</table>

### UNT Core: American History

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>UNT Requirement</td>
<td>TCCNS Option</td>
</tr>
<tr>
<td></td>
<td>CHEM 3510</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>EDCI 3500*</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>CHEM 3451/3452</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>BIOC 4540/4560</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>UNT Core: American History</td>
<td>See list of approved courses</td>
</tr>
</tbody>
</table>

### EDCI 4500*

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>UNT Requirement</td>
<td>TCCNS Option</td>
</tr>
<tr>
<td></td>
<td>EDCI 4500*</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>BIOL 3510/3520</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Advanced BIOL w/ Lab</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>CHEM 4700</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>UNT Core: American History</td>
<td>See list of approved courses</td>
</tr>
</tbody>
</table>

Last Revised: May 3, 2019
Students may not declare a major within the College of Science until they have completed MATH 1100 or have demonstrated proficiency through a math placement exam. Applicants who do not meet the math proficiency requirement will be provisionally admitted as Pre-College of Science (PCOS). PCOS students may visit the College of Science Advising Center for assistance.

Courses Recommended for Transfer
The UNT Core requirements are shown with Texas Common Course Numbering System values only when UNT offers equivalent courses. There may be other courses in transfer that apply toward the specific degree requirement, but those listed are known to apply.

### UNT Core: Communication

- ENGL 1301 and 2311
  
  A grade of 'C' or better is required on courses applied toward this requirement.

  **ENGL 2311 is a required course for the B.S. in Biochemistry (see next column).**

### UNT Core: Mathematics

This requirement will be met by fulfilling the B.S. Biochemistry major mathematics requirement (see next page).

### UNT Core: Life & Physical Sciences

This requirement will be met by fulfilling the B.S. Biochemistry major requirements (see next column).

### UNT Core: American History

Two courses chosen from: HIST 1301, 1302, 2301

### UNT Core: Government/Political Science

- GOVT 2305 and 2306

### UNT Core: Creative Arts

One course chosen from: ARTS 1301 or 1304; DRAM 1310; MUSI 1306; SPCH 2341

### UNT Core: Language, Philosophy and Culture

This requirement will be met by fulfilling the Teach North Texas requirements (see next page).

### UNT Core: Social & Behavioral Sciences

One course chosen from: ANTH 2346 or 2351; COMM 1307; CRIJ 1301; ECON 2301 or 2302; GEOG 1303; PSYC 2301; SOCI 1301; SOCW 2361; SPCH 1318; TECA 1354

### UNT Core: Component Area Option

This requirement will be met by fulfilling the B.S. Biochemistry major requirements (see next column).

### Biochemistry: Foundation Requirements

- Students must have a grade of C or better and a minimum 2.5 grade point average in all Foundation courses before enrolling in advanced courses required for the major.

  - BIOL 1406 or 1306/1106
  - BIOL 1407 or 1307/1107 or 2421 or 2321/2121
  - CHEM 1411 or 1311/1111
  - CHEM 1412 or 1312/1112
  - CHEM 2423 or 2323/2123 (approved substitution)
  - MATH 2312 or 2412

  BIOL 1406, BIOL 1407, CHEM 1411 and 1412 fulfill either Life & Physical Sciences and the Component Area Option core requirements.

  MATH 2312 also fulfills the Mathematics core requirement.

### Biochemistry: Major Requirements

- CHEM 2425 or 2325/2125 (approved substitution)

#### Advanced Biochemistry Courses

No TCCNS options available

Courses listed above are TCCNS options and do not include all courses required for the UNT B.S. Biochemistry major.

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http://registrar.unt.edu/transfer-guides

Last Revised: May 3, 2019
Biochemistry: Additional Course Requirements

- ENGL 2311 (also fulfills part of the Communications core requirement) (C or better)
- MATH 2313 or 2413 or 2513 (fulfills both Mathematics core and program requirements) (C or better)
- MATH 2314 or 2414 (C or better)
- PHYS 2425 or 2325/2125 (approved substitution)
- PHYS 2426 or 2326/2126 (approved substitution)
- A minimum 2.5 grade point average and a C or better in Foundation courses, a C or better in all advanced courses counting toward major requirements, and a minimum 2.0 UNT and overall (UNT and transfer) grade point average is required for graduation.
- Students in the department whose Foundation or overall grade point average drop below the minimum GPA for two consecutive semesters will be removed from the program.
- Only two attempts will be allowed for each biology and biochemistry course in this degree.

Teach North Texas Program: Minor requirements

Students must complete the required 22 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program for more information on enrolling in the certification courses. No TCCNS options available for Teach North Texas requirements.

A 2.75 GPA is required on all courses counting toward the Teach North Texas minor, see current UNT Undergraduate Catalog for all minor requirements.

PHIL 2600, offered only at UNT, is required for the Teach North Texas Program and will also fulfill the Language, Philosophy and Culture core requirement.

Teacher Certification Information

To be certified to teach in the State of Texas, the student must successfully pass the following exams:

- Exam #1  TExES: Pedagogy & Professional Responsibilities (EC-12)
- Exam #2  TExES: Chemistry (7-12)

Additional requirements for Teacher Certification in Chemistry include a 2.5 overall GPA (including all transferred courses), a 2.5 UNT GPA and a 2.5 major GPA.

Special Notes

Hours Required and General/College Requirements: A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the General University Requirements section of the UNT catalog and the College of Science requirements.

UNT Core Curriculum/Transfer of Core Curriculum: UNT complies with the mandates of the 1997 Texas Legislature regarding requirements for state-assisted institutions. Students who successfully complete the common core curriculum (in whole or in part) at a Texas state-assisted institution of higher education are eligible to transfer as “core complete” for those categories in the UNT University Core Curriculum.

Individual academic programs may require courses contained in parts of the University Core Curriculum. Students who wish to take courses that will fulfill both core and major/program requirements simultaneously should check with academic advisors for assistance in selecting core courses.

Choice of Catalog: Any student transferring directly from a Texas public community college to UNT shall have the same choice of catalog designating degree requirements as the student would have had if the dates of attendance at the university had been the same as the dates of attendance at the community college.

The College of Science required curriculum and policies are located in the undergraduate catalog under the corresponding catalog year.

For additional program and contact information, visit the College of Science Student Advising website at www.cos.unt.edu/advising.