### College of Science

#### B.A. Physics, with Secondary Level Teacher Certification

#### In Physical Science Grades (7-12)

##### 2018-2019 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/) 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.

### Table of Requirements

<table>
<thead>
<tr>
<th>Year</th>
<th>FALL SEMESTER</th>
<th>SPRING SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>UNT Requirement</strong></td>
<td><strong>TCCNS Option</strong></td>
</tr>
<tr>
<td><strong>FRESHMAN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1310</td>
<td>ENGL 1301</td>
<td>TECM 2700 (recommended) or ENGL 1320</td>
</tr>
<tr>
<td>CHEM 1410/1430</td>
<td>CHEM 1411 or 1311/1111</td>
<td>CHEM 1420/1440</td>
</tr>
<tr>
<td>MATH 1710</td>
<td>MATH 2313 or 2413 or 2513</td>
<td>MATH 1720</td>
</tr>
<tr>
<td>UNT Core: Social &amp; Behavioral Sciences</td>
<td><a href="#">See list of approved courses</a></td>
<td>PHYS 1710/1730</td>
</tr>
<tr>
<td>TNTX 1100* (1 hr)</td>
<td>None</td>
<td>TNTX 1200* (2 hrs)</td>
</tr>
</tbody>
</table>

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

<table>
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<tr>
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<tr>
<td></td>
<td><strong>UNT Requirement</strong></td>
<td><strong>TCCNS Option</strong></td>
</tr>
<tr>
<td><strong>SOPHOMORE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>Consult UNT advisor</td>
<td>Elective</td>
</tr>
<tr>
<td>MATH 2730</td>
<td>MATH 2315 or 2415</td>
<td>PHYS 3010/3030</td>
</tr>
<tr>
<td>PHYS 2220/2240</td>
<td>PHYS 2426 or 2326/2126</td>
<td>Elective</td>
</tr>
<tr>
<td>UNT Core: Component Area Option</td>
<td><a href="#">See list of approved courses</a></td>
<td>PSCI 2305</td>
</tr>
<tr>
<td>EDCI 3500* (counts as COS Core Breadth Requirement)</td>
<td>None</td>
<td>EDCI 4000* (counts as COS Core Breadth Requirement)</td>
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<tbody>
<tr>
<td><strong>JUNIOR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNT Core: American History</td>
<td><a href="#">See list of approved courses</a></td>
<td>UNT Core: American History</td>
</tr>
<tr>
<td>PSCI 2306</td>
<td>GOVT 2306</td>
<td>UNT Core: Creative Arts</td>
</tr>
<tr>
<td>Elective (2 hrs)</td>
<td>Consult UNT advisor</td>
<td>Elective</td>
</tr>
<tr>
<td>B.A. Physics: Laboratory Science (may count as Component Area Option)</td>
<td><a href="#">See list of approved courses</a></td>
<td>Elective</td>
</tr>
<tr>
<td>PHIL 2600 (counts as Language, Philosophy &amp; Culture)</td>
<td>None</td>
<td>Advanced PHYS Elective</td>
</tr>
<tr>
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<td>None</td>
<td>Advanced PHYS Elective</td>
</tr>
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<tbody>
<tr>
<td><strong>SENIOR</strong></td>
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</tr>
<tr>
<td>Advanced PHYS Elective</td>
<td>None</td>
<td>EDSE 4608* (Student Teaching) (counts as COS Core Breadth Requirement)</td>
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<tr>
<td>PHYS 4700</td>
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<td>EDSE 4618* (Student Teaching)</td>
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<tr>
<td>EDCI 4500* (counts as COS Core Breadth Requirement)</td>
<td>None</td>
<td>EDSE 4628* (Student Teaching Seminar) (1 hr)</td>
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<tr>
<td>Elective (advanced)</td>
<td>Consult UNT advisor</td>
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[http://registrar.unt.edu/transfer-guides](http://registrar.unt.edu/transfer-guides)  
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College of Science

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In Physical Science Grades (7-12)
2018-2019 Texas Common Course Numbering System Transfer Guide

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 office for assistance.

The BA with a major in physics is designed for students planning to teach physics in public school, taking a double major or desiring a liberal arts education with a science concentration.

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 ENGL 1302 or 2311
A grade of 'C' or better is required on courses applied toward this requirement.

ENGL 2311 is recommended.

UNT Core: Mathematics

This requirement will be met by fulfilling the B.A. Physics mathematics requirement (see next column).

UNT Core: Life & Physical Sciences

This requirement will be met by fulfilling the B.A. Physics 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 1318; TECA 1354

UNT Core: Language, Philosophy and Culture

This requirement will be met by fulfilling Teach North Texas Program 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

One course for this requirement may be met by fulfilling the B.A. Physics major requirements (see column below). In addition, complete one course from Option A OR Option B.

Option A: ANTH 2346, 2351, or 2401; ARTS 1301 or 1304; ASTR 1403 or 1404; BIOL 1408 or 1413, or 2406; COMM 1307; CRIJ 1301; DRAM 1310; ECON 2301 or 2302; ENGL 1301, 1302, 2311, 2332, or 2333; HECO 1322; GEOG 1303; GEOL 1401 or 1403; HIST 1301, 1302, 2321, or 2322; MATH 1316, 1324, 1325 or 1425, 1332, 1342 or 1442 or 2442, 1350, 2305 or 2405, 2312 or 2412, 2313 or 2413 or 2513; MUSI 1306 or 1307; PHIL 1301, 1304, 2303, 2306, or 2316; PHYS 1403, 1404, 1410, or 1415; PSYC 2301; SOCI 1301; SOCW 2361; SPCH 1315, 1318 or 2341; TECA 1354

Option B: SPCH 1311; TECA 1303

College of Science: Breadth Requirement

Students pursuing the Bachelor of Arts must complete four classes (minimum 3 hours each) from classes outside of the College of Science. These classes may not be simultaneously applied to University Core Curriculum requirements.

This requirement will be deemed complete for Bachelor of Arts students that complete the Teach North Texas program.

http://registrar.unt.edu/transfer-guides
### B.A. Physics: Other Course Requirements

**Required courses in mathematics:**
- MATH 2313 or 2413 or 2513 (fulfills both university mathematics core and major requirements)
- MATH 2314 or 2414
- MATH 2315 or 2415

**Required courses in laboratory science:**
Also fulfills Life & Physical Sciences & may count as part of the Component Area Option core requirements (denoted with *).
- CHEM 1411 or 1311/1111
- CHEM 1412 or 1312/1112
Complete one of the following Natural/Life Sciences:
- *ANTH 2401
- BIOL 1406 or 1106/1306*
- BIOL 1407 or 1107/1307*
- BIOL 1408* or 1108/1308
- BIOL 2401 or 2101/2301
- BIOL 2402 or 2102/2302
- BIOL 2406 or 2106/2306
- CHEM 1412 or 1312/1112

**Approved substitution**

Substitutions in the B.A. or B.S. degree programs may be made only with the written consent of the department chair.

A minimum grade point average of 2.5 in all advanced-level science and mathematics courses is required for graduation with a degree in physics or engineering physics.

### B.A. Physics: Major Requirements

- PHYS 2425 or 2325/2125
- PHYS 2426 or 2326/2126

*Courses shown above are TCCNS options and do not include all courses required for UNT Physics major.*

### 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, available only at UNT, will fulfill both the Language, Philosophy & Culture core and the Teach North Texas requirements.

### 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: Physical Science (6-12)

Additional requirements for Teacher Certification in Physical Science 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 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the General University Requirements section of the UNT catalog and the College of Science requirements.

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 Sciences 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](http://www.cos.unt.edu/advising).

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

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