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<b>UTeach-Natural Sciences</b>	<b>Secondary</b>	Teaching	Option	Certificate
2020–2022 Catalog				

	Minimum Hrs Required Course(s) Fulfilled	
REQUIRED COURSEWORK	×	STUDENTS MUST ALSO SELECT A CERTIFICATION AREA
Teacher Education Preparation		FROM ONE OF THE OPTIONS BELOW:
Coursework:		Composite Science Certification:
Step 1 (UTS101)		Students must select a primary field from one of the following: Biology, Chemistry, Physics or Geology (restricted to GEO majors)
Step 2 (UTS110)		and complete a minimum of 24 hours in that field.
EDC 365C or UTS 350 - Knowing and Learning		Primary Field BIOLOGY Course Requirements: BIO 325, BIO 370, and additional coursework to meet minimum
EDC 365D or UTS 355 - Classroom Interactions		hours required: BIO 320, BIO 326M (or BIO 326R), BIO 328 strongly recommended
EDC 365E or UTS 360 - Project Based Instruction		Primary Field CHEMISTRY Course Requirements:
EDC 651S - Secondary School Teaching Practicum, Science or Math		CH 320M, CH 320N and CH 220C or CH 328M + CH 128K and CH 328N + CH 128N BCH 339F or BCH 369; CH 353M or CH 353, CH 456; and
UTS 170 - Student Teaching Seminar		additional coursework to meet minimum hours required
<i>Research Methods</i> Biology: 337-2; Chemistry: 368-1, or Physics: 341-7		Primary Field GEOLOGY Course Requirements (Restricted to Geology majors): GEO 401 (or GEO 303), GEO 405, GEO 416K, GEO 416M, GEO 420K (or GEO 320L) and additional coursework to meet minimum hours required
Perspectives History: 329U or Philosophy: 329U (Students must complete both Research Methods and Perspectives) Middle Grades Certification Only Complete the Following Coursework: EDP 350G, EDC 339F		<ul> <li>Primary Field PHYSICS</li> <li>PHY 355, PHY 353L</li> <li>9 hours chosen from the following: PHY 329, PHY 336K, PHY 338K, PHY 333, PHY 352K, PHY373, SCI 365 and additional coursework to meet minimum hours required</li> <li>For all composite science tracks, in addition to their primary field, students also choose 2nd (12 hours), 3rd (6 hours), and 4th (6 hours) fields from CH, BIO, PHY, GEO; coursework for 2nd, 3rd, 4th fields must be outside of their primary field. See a UTeach advisor for details.</li> <li>Computer Science Certification (Restricted to CS Majors): A minimum of 24 hours of computer science coursework is required Complete calculus sequence; CS 312, CS 311, CS 314, CS 429 One course chosen from the following: CS 439, CS 343, CS 345, CS 347, CS 354, or CS 370, enough additional hours to reach a total of 24 semester credit hours.</li> <li>To add certification in Mathematics, students must take the following courses: M 315C, M 325K, M 333L, M 340L (or SDS 329C),</li> </ul>
		M 358K, M 362K (or SDS 321), M 375D (or M 343K or M 373K)



#### Mathematics Certification:

Complete calculus sequence; M 315C, M 325K, one of M 375D, M 343K, or M 373K, M 333L, M 341, M 362K, M 358K.

## Mathematics, Physical Science, Engineering Certification

(Engineering Majors Only): Calculus for degree; PHY 303K + PHY 103M, PHY 303L + PHY 103N; M 315C, M333L, M 427K; CH 301. Senior Design Project counts in lieu of Research Methods (see above).

### Physical Science (Physics and Chemistry) Certification:

Calculus for degree; Physics I and II plus PHY 315, and PHY 115L CH 301, CH 302, CH 204, CH 353 or CH 353M + 153K, CH 455 (or 456); PHY 353L (or 355); 3 hours of approved upper-division physics. See a UTeach advisor for details.

#### Physics and Mathematics Certification

Calculus for degree; Complete the following Physics sequence: (12 hours): PHY 301, PHY 101L, PHY 316, PHY 116L, PHY 315, and PHY 115

PHY 355, PHY 353L; 3 courses from the following list: PHY 329, PHY 333, PHY 336K, PHY 338K, PHY 352K, PHY 373, SCI 365; M 315C, M 375D, M 427K, M 427L, M 325K, M 333L, M 340L, M 362K, M358K.

## **UTEACH POLICIES & PROCEDURES**

- · No application for admission required
- Courses in the certification area are required in addition to the Professional Development Sequence.
- All courses must be for science majors.
- A C- or better is required in order to count a course toward certification.
- A 2.5 cumulative GPA is required for teacher certification.
- All content courses must be completed in order to be recommended for educator certification.
- BSA Students: Courses in the Professional Development Sequence (24 hours) fulfill the requirement for the transcript recognized certificate and the BSA degree.
- All content courses must be completed in order to be recommended for educator certification.
- Students must meet departmental pre-requisites.
- Students completing requirements will be automatically entered into the transcripted certificate system.
- Please visit the certificate website for additional information