

Minimum Hrs Required

## **UTeach-Natural Sciences Secondary Teaching Option Certificate** 2022-2024 Catalog

### **REQUIRED COURSEWORK**

**Teacher Education Preparation** Coursework:

Step 1 (UTS101)

Step 2 (UTS110)

EDC 365C or UTS 350 - Knowing and Learning

EDC 365D or UTS 355 - Classroom Interactions

EDC 365E or UTS 360 - Project Based Instruction

EDC 651S - Secondary School Teaching Practicum, Science or Math

UTS 170 - Student Teaching Seminar

Research Methods

Biology: 337-2; Chemistry: 368-1,

or Physics: 341-7

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

STUDENTS MUST ALSO SELECT A CERTIFICATION AREA FROM ONE OF THE OPTIONS BELOW: Composite Science Certification: Students must select a primary field from one of the following: Biology, Chemistry, Physics or Geology (restricted to GEO majors) and complete a minimum of 24 hours in that field. **Primary Field BIOLOGY Course Requirements:** BIO 325, BIO 370, and additional coursework to meet minimum hours required: BIO 320, BIO 326M (or BIO 326R), BIO 328 strongly recommended **Primary Field CHEMISTRY Course Requirements:** 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 additional coursework to meet minimum hours required 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 Primary Field PHYSICS PHY 355, PHY 353L 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

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.

### 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.

To add certification in Mathematics, students must take the following courses: M 315C, M 325K, M 333L, M 340L (or SDS 329C), M 358K, M 362K (or SDS 321), M 375D (or M 343K or M 373K)

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# **UTeach-Natural Sciences Secondary Teaching Option Certificate 2022–2024 Catalog** (*Continued*)

#### **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