

## PROGRAM OBJECTIVES

- To develop a broad and fundamental understanding and an in-depth knowledge of the central concepts and content which is common to the fields of biology, chemistry, earth science, and physics;
- To develop an understanding of the inter-relationships between science and technology, and other academic fields;
- To develop a positive attitude toward the teaching and learning of science;
- To develop effective teaching skills for secondary education;
- To develop the flexibility to adapt science instruction to meet the varied needs, interests and abilities of high school students;
- To acquire knowledge of assessment and evaluation procedures for students and how to implement these;
  - To develop an understanding of the value of research for science; and
  - To gain knowledge of the laws and standards regarding safety in a science laboratory.



*"Preparing Educators for Diverse Cultural Contexts"*



**NORTH  
CAROLINA  
CENTRAL  
UNIVERSITY**  
FOUNDED 1910

### **NORTH CAROLINA CENTRAL UNIVERSITY SCHOOL OF EDUCATION**

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North Carolina  
Central University

# Comprehensive Science Education



James E. Shepard, Founder



## PROGRAM DESCRIPTION

The Comprehensive Science Education Program in the College of Science and Technology, in collaboration with the School of Education, at North Carolina Central University prepares science teachers (grades 9-12) to provide exemplary instructional programs for all public school students in diverse cultural and educational environments. The teacher candidates in our program blend course work and field experiences in our partnership network to develop the essential knowledge and skills that will lead to both exemplary teaching and success for students in the classroom.

Our program is unique in that the teacher candidates are quite diverse in terms of many dimensions, including (but not limited to) age, gender, ethnicity, work experiences, and teaching experiences.

## PROGRAM CLASSIFICATION

**Traditional First-Degree Students** are those who are seeking a first bachelor's degree in Comprehensive Science Education. They must complete the General Education Curriculum (GEC) program, make grades of C or better in the three English requirements (ENG 1110, 1210, 1250), pass the PRAXIS I\*, and have a minimum overall 2.5 GPA to be formally admitted to the Teacher Education Program.

**Second-Degree Students** are those who have a bachelor's degree in another area and want to become licensed to teach in the area of Comprehensive Science Education. Second-degree students apply through Undergraduate Admissions. Their transcripts are first evaluated by Admissions and then by the program coordinator to determine the specific program of study leading to a second-degree and licensure. For second-degree students, GEC requirements are automatically fulfilled.

\*Alternatives: SAT scores of 1100 or above (550 on Verbal or Quantitative will exempt candidates from some tests requirements) or a minimum ACT composite score of 24.

**Licensure-Only Students** are those who hold a bachelor's degree, a license in another teaching area or who hold an advanced degree (master's or doctorate). Those who think they are eligible for this classification should contact the Office of Alternative Licensure Programs. Licensure-only students will submit copies of their current license and official transcripts from all previous institutions. An individual program will be developed based on a transcript evaluation.

## COMPREHENSIVE SCIENCE COURSES

### Chemistry Education Courses

Professional Studies

EDU 2800: Instructional Technology (3)

EDU 3000: Educational Psychology (3)

EDU 3010: Human Growth & Development (3)

EDU 3030: Diversity, Pedagogy, and Social Change (3)

EDU 3120: Inclusive Teaching/Students with Special Needs (3)

EDU 3170: Assessment of Learning (3)

EDU 3840: Instructional Planning & Programs in Science (3)

EDU 4102: Materials & Methods in Comprehensive Science (3)

EDU 4202: Student Teaching & Seminar (9-12)(6)

### Comprehensive Science Education Specialty Courses Common Core

BIOL 1101: General Biology I (4)

BIOL 1201: General Biology II (4)

CHEM 1100: General Chemistry I (4)

CHEM 1200: General Chemistry II (4)

GEOG 2100: Physical Geography (3)

GEOG 2350: Earth Science (3)

PHYS 2110: General Physics I (4)

PHYS 2120: General Physics II (4)

Plus, specialization courses in either biology, chemistry, earth science, or physics

