DEPARTMENT OF BIOLOGY
Bachelor of Science in Science Education

PROGRAM OVERVIEW

The undergraduate Science Education program at The University of North Carolina at Pembroke are designed to prepare candidates for professional careers in public school teaching. The Science Education program nurtures the development of science teachers who are able to facilitate the development of scientific literacy in secondary schools.

The Science Education program is accredited by the North Carolina State Department of Public Instruction, the National Council for the Accreditation of Teacher Education (NCATE), and the Southern Association of Colleges and Schools (SACS). The Science Education Program is an interdisciplinary program offered cooperatively through the departments of Biology, Chemistry and Physics, Geology and Geography, and Education.

Program of Study

Program Goals and Objectives

Science Education Program Goals and Objectives

The goal of the Science Education program is to prepare competent science teachers committed to the development of scientific literacy in diverse secondary school learners. The program helps the prospective science educator integrate the knowledge bases underlying the curricular areas of science into an internal framework of their own through collaboration with peers, university faculty, and public school partners. The prospective science teacher should possess the following characteristics:

1. An understanding of unifying concepts of science and how this knowledge will enable students to deal with personal and social problems intelligently;
2. An understanding of the nature of science and the historical development of scientific thought;
3. An understanding of the interrelationships between science, mathematics, technology, and society;
4. An understanding of how science contributes to the personal development of diverse individuals;
5. An understanding of developmentally appropriate instructional methods and curriculum of science, to include inquiry-based instruction, assessment techniques, and the integration of technology;
6. The communication skills necessary for effective teaching, as well as, the skills necessary for effective classroom management;
7. An understanding of the role of research in science education;
8. An awareness of the importance of incorporating best practices into science classrooms through lifelong professional development;

9. An awareness of the safety precautions specific to classroom, stockroom, laboratories, and other areas used for science instruction;
10. The ability to collaborate with colleagues, families, and community members to improve science instruction for all students.