

Comprehensive Science Education

Department Information

- **Department Web Site:**
www.ndsu.edu/education/ (<http://www.ndsu.edu/education/>)
- **Credential Offered:**
B.S.; B.A.
- **Official Program Curriculum:**
catalog.ndsu.edu/undergraduate/program-curriculum/comprehensive-science-education/ (<http://catalog.ndsu.edu/undergraduate/program-curriculum/comprehensive-science-education/>)

The comprehensive science education degree requires coursework in biological sciences, chemistry, physics and earth science, as well as mathematics. Teaching science in middle and secondary school requires deep knowledge of (a) science content, (b) current theories of adolescent development, and (c) current best practices in middle and secondary instruction. Accordingly, the comprehensive science education major combines coursework in related sciences with professional education courses on teaching and learning.

The Program

Teacher candidates in comprehensive science education are prepared to teach students grades 5-12 with skill and confidence. The program is designed to develop science content knowledge as well as proficiency in a range of science-related skills and laboratory practices. Our professional education courses prepare teacher candidates to incorporate active learning strategies, create effective methods for assessment, and adjust instruction to accommodate diverse learners. Teacher candidates also apply their knowledge and build their teaching skills during multiple clinical experiences in local schools.

Professional Education Courses

Teacher candidates may enroll in the 300-level professional education courses before being formally admitted to the School of Education (SOE). Prior to enrolling in the 400-level courses, teacher candidates must complete the application for admission to the SOE; attain a minimum of a 2.75 grade point average overall in their course work and education courses; and pass the Praxis Core Academic Skills test or meet minimum scores on the ACT+ Requirements for admission can be found on the School of Education website (<https://www.ndsu.edu/education/>).

Student Teaching

Student teaching (clinical practice) is the culmination of the teacher preparation program. During the clinical practice, teacher candidates apply the knowledge and skills acquired in their college courses to real-world classrooms under the supervision of experienced classroom teachers in middle or secondary schools. Faculty members from NDSU conduct regular on-site visits to support, encourage, and evaluate student teachers so that they gain the confidence and ability to join the teaching profession after graduation.

Student Advisement

Comprehensive science education teacher candidates are assigned to academic advisors who work closely with them to plan their programs of study and to advise and assist them as they progress to degree completion. Students are encouraged to meet with their advisor at least once every semester, as well as whenever needed.

licensure

Upon completing this program, teacher candidates are eligible for teacher licensure to teach all content areas of science in North Dakota. Teacher candidates interested in licensure to teach in other states should consult with their academic advisor because comprehensive science is not a typical teacher licensure category in all states. Our program is accredited by the Council for the Accreditation of Educator Preparation (CAEP) and approved by the North Dakota Education Standards and Practices Board (ESPB).

Career Opportunities

Science teachers are in high demand across the country, so our graduates usually obtain full-time employment in school districts shortly after graduation.

Sample Program Guide

IMPORTANT DISCLAIMER: This guide is not an official curriculum. This guide is a sample four-year degree plan of how students might plan this major with other degree requirements to complete their education in four years. Student plans will vary from this sample due to a variety of factors, such as, but not limited to, start year, education goals, transfer credit, and course availability. To ensure proper degree completion, enrolled students should utilize Degree Map (<https://www.ndsu.edu/registrar/degreemap/>) and Schedule Planner (<https://www.ndsu.edu/onestop/degree-map-and-planning/>) in Campus Connection and consult regularly with academic advisors to ensure graduation requirements are being met.

First Year			
Fall	Credits	Spring	Credits
ENGL 110		3 Primary Concentration ¹	4
Primary Concentration ¹		4 Secondary Concentration ¹	4
Secondary Concentration ¹		4 COMM 110	3
Gen Ed Quantitative Reasoning		3 ENGL 120	3
Gen Ed Wellness		2 Gen Ed Social & Behavioral Science & Cultural Diversity	3
		16	17
Second Year			
Fall	Credits	Spring	Credits
EDUC 321		3 EDUC 322	3
Primary Concentration ¹		4 Primary Concentration ¹	4
Secondary Concentration ¹		4 Secondary Concentration ¹	3
Secondary Concentration ¹		3 Gen Ed Humanits & Fine Arts	3
Gen Ed Humanities/FA & Global Perspectives		3 Gen Ed Social & Behavioral Science	3
Complete Core Academic Skills Exam or access your ACT+ scores		Apply to the School of Education	
		17	16
Third Year			
Fall	Credits	Spring	Credits
BIOL 364		3 EDUC 481	3
EDUC 451		3 EDUC 486	3
Primary Concentration ¹		3 Primary Concentration ¹	3
Primary Concentration ¹		3 Secondary Concentration ¹	3
Secondary Concentration ¹		4 Tertiary Concentration ¹	4
		16	16
Fourth Year			
Fall	Credits	Spring	Credits
EDUC 475		2 EDUC 485	1
EDUC 482		3 EDUC 487	9
EDUC 489		3 EDUC 488	3
ENGL 324		3	
Tertiary Concentration ¹		4	
Apply for Student Teaching			
Complete PLT (grades 7-12) Exam			
Complete Subject Area Assessment Exam			
		15	13
Total Credits: 126			

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Refer to the official curriculum guide in the appropriate catalog year to select the classes that are identified in each of the concentration areas. The credits associated with this plan are approximate. The minimum credits for each concentration area will depend on the courses selected from the official curriculum guide.