



WATSON SCHOOL OF EDUCATION
UNIVERSITY OF NORTH CAROLINA WILMINGTON

(For students beginning the Secondary Education Program Fall 09)

Teacher Licensure Program in Secondary Science

Program Goals

The teacher licensure program is designed to develop highly competent and caring professionals to serve in educational leadership roles. The program is designed around the following four core principles:

- Intensive school experiences in secondary classrooms throughout the program which prepare students to teach in large, traditional high school settings and small learning communities, such as Freshman Academies and Early Colleges
- An emphasis on broad issues of diversity, including the development of culturally responsive pedagogy, serving students with special needs, and teaching English Language Learners
- A focus on strong content preparation, effective curriculum design, and cross-discipline, integrated curriculum
- Global connections to the high school curriculum and overall secondary experience

Upon completion of the secondary licensure program, students should be able to:

- Demonstrate leadership in their classroom, in the school, and in the community
- Establish a respectful environment for a diverse population of students
- Know the content they teach
- Collaborate with colleagues across grade levels and disciplines
- Relate learning to applied, authentic experiences
- Contextualize teaching, learning, and schools within a global perspective
- Facilitate learning for all students
- Establish a pattern of reflective practices and scholarly inquiry culminating in confidence, professionalism, and effectiveness in the role of a teacher.
- Use technology to support teaching and learning
- Communicate in Standard English, both verbally and in written formats
- Demonstrate professional behaviors, a caring personality, a positive disposition to helping students be successful, and a proactive nature in connecting to families and the community.

Secondary Science Program Objectives

The objectives of this program are to encourage the development of exemplary secondary science teaching through competency and understanding in the following areas:

- a. Familiarity with the standards, recommendations, and resources of international, national, state, and local science education organizations.

- b. Planning and implementation of instruction consistent with the standards and recommendations of international, national, state, and local science education organizations.
- c. Selecting and/or designing instructional and assessment strategies appropriate for the needs and interests of high school students.
- d. Providing a complex learning environment in which students are encouraged to think scientifically.
- e. Contributing to personal and collegial professional development through self-reflective activities, inquiry and research activities, and professional communications.
- f. Providing opportunities for the effective use and integration of technology tools to improve technology and science literacy skills.

Licensure Requirements

Students who plan to become licensed teachers in the North Carolina public schools must complete the university’s Basic Studies expectations, *all requirements in the major*, and be formally admitted to the Watson School of Education. Requirements for admission are listed in the UNCW Undergraduate Catalogue, and also are listed on the Watson School’s website at www.uncw.edu/ed. For the secondary education program, completion of SEC 200, SEC 210 and SEC 220 is required, all with a grade of “C” (2.00) or better.

In addition to the requirements for the academic major, the Secondary Education courses listed below are required for licensure. A grade of “C” or better must be earned in the following courses:

SEC 200 Teaching, Schools and a Global Society	(3)
SEC 210 Diverse Learners in Secondary Schools	(3)
SEC 220 Field Experience Block 1	(2)

NOTE: The courses listed below require admission to the Watson School of Education

SEC 300 Curriculum Design, Technology and Learning Assessment	(3)
SEC 310 Reading and Literacy in the Secondary School	(3)
SEC 320 Field Experience Block 2	(2)
SEC 406 Theory & Practice in Teaching Secondary Science 9-12	(4)
SEC 421 Field Experience Block 3: Secondary Teaching Science	(1)
SEC 410 ESL Topics for Secondary Teachers	(3)
SEC 422 Field Experience Block 3: ESL	(1)
SEC 431: Practicum	(12)
SEC 430 Seminar – Leadership, Reflection and Management Practices	(3)

Total = 40 semester hours

Secondary Program Course Sequence

Block 1	Block 2	Block 3	Block 4
Pre-Admission Block	Pre-Methods Block	Methods Block	Internship
SEC 200: Teaching Schools, and a Global Society (3)	SEC 300: Curriculum Design, Technology, and Learning Assessment (3)	SEC 406: Theory and Practice in Teaching Secondary Science (4)	SEC 430: Seminar - Leadership, Reflection and Management Practices (3)
SEC 210: Diverse Learners in Secondary Schools (3)	SEC 310: Reading and Literacy in the Secondary School (3)	SEC 410: ESL Topics for Secondary Teachers (3)	SEC 431: Practicum (12)
SEC 220: Field Experience Block 1 (2)	SEC 320: Field Experience Block 2 (2)	SEC 421: Field Experience Block 3: Secondary Teaching (1)	
		SEC 422: Field Experience Block 3: ESL (1)	
Hours 8	8	9	15

Program Notes

- The program is designed in a cohort model: Students will remain with the same group of students from Block 1 through to Block 4 of the program.
- Advance planning of programs is essential for students interested in becoming teachers in secondary or allied education areas. Block 1 and Block 3 courses are only offered in the fall semester, and Block 2 and Block 4 are only in the spring semester.
- Students should apply to the Watson School of Education as soon as admission requirements are met (typically at the end of the fall semester of the junior year), select courses carefully, and plan their programs in regular consultation with their advisors. A minimum of 124 hours is required for graduation.
- Students must comply with the Academic Achievement and Professional Behavior expectations described in the Watson School of Education's *Standards for Professional Conduct*.
- Successful completion of field experiences assignments is required in order for students to be able to proceed to take education courses in the next block.
- In order to be eligible for internship students must:
 - a. be admitted to the Watson School of Education,
 - b. have a cumulative GPA of 2.7 or better,
 - c. have completed all required Education courses and ideally, all academic major courses.
 - d. have demonstrated appropriate professional dispositions as described in the Watson School of Education's *Standards for Professional Conduct*.
 - e. complete an application for internship at least one semester in advance of the intended student teaching semester and attend orientation meetings.

Praxis II Specialty Tests are not required for majors who complete the teacher education program, including internship. Lateral entry teachers are required to take Praxis II. Registration materials and study guides are available online at www.ets.org/praxis Additional Information for Teacher Licensure

Students seeking Secondary Science certification can major in Biology, Chemistry, Geology, or Physics. Additional requirements are listed below and are based on your intended major.

BIOLOGY MAJORS

In addition to the 51 hrs of core requirements for a B.A. in Biology degree, 70 hrs of core requirements for a B.S. in Biology degree, or 74-75 hrs of core requirements for a B.S. in Marine Biology, *Biology* majors who wish to be licensed in Secondary Science must complete at least 21 hours from three science areas other than biology. A minimum of two courses from each discipline, including PHY 111 or 260, is required.

CHEMISTRY MAJORS

In addition to the 60 hrs of core requirements for a B.A. degree or 76-81 hrs of core requirements for a B.S. degree, *Chemistry* majors who wish to be licensed in Secondary Science must complete at least 21 hours in other science areas including:

1. BIO 110 and a higher level biology course
2. Two Geology courses to be selected from: GLY 101, 120, or 150
3. PHY 111 or 260

GEOLOGY MAJORS

In addition to the 49-52 hrs of core requirements for a B.A. degree or 74 hrs of core requirements for a B.S. degree, *Geology* majors who wish to be licensed in Secondary Science must complete at least 21 hours in other science areas including:

1. BIO 204 and 205 or BIO 204 and 206
2. GGY 230
3. GLY 150
4. PHY 111 or 260

PHYSICS MAJORS

In addition to the 46 hrs of core requirements for a B.A. degree or 66 hrs of core requirements for a B.S. degree, *Physics* majors who wish to be licensed in Secondary Science must complete at least 21 hours from three science areas other than physics including:

1. BIO 110 and a higher level biology course
2. GLY 120 or 150
3. CHM courses

Note: Students interested in the B.S. Physics degree are advised to take the PHY 201-202 sequence in the freshman year.

The University of North Carolina at Wilmington is committed to and will provide equality of educational and employment opportunity for all persons regardless of race, sex, age, color, gender, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, veteran status or relationship to other university constituents – except where sex, age, or ability represent bona fide educational or occupational qualifications or where marital status is a statutorily established eligibility criterion for state-funded employee benefit programs.