NEAG SCHOOL OF EDUCATION (UEDUC) **UNIVERSITY OF CONNECTICUT (UCONN)**

BIOLOGY EDUCATION PROGRAM GUIDELINES
BACHELOR OF SCIENCE IN EDUCATION (BIOL2 BS)

These guidelines summarize the requirements for a Bachelor of Science and partial completion of Connecticut certification requirements in biology education (4-12) for students following the 2025-2026 requirements.

DEGREE REQUIREMENTS

1. Complete the COMMON CURRICULUM REQUIREMENTS listed in the Academic Regulations of the University of Connecticut Undergraduate Catalog 2025-2026, which include **Topic of Inquiry (TOI) Requirements**: At least one course (3 credits) in each of the 6 different TOIs; 6 different subject areas; one laboratory science (TOI-6L); minimum of 21 TOI credits; TOI Focus area (3 courses in 1 TOI) or Theme (3 pre-determined courses); and meet **Competency Requirements**: two W courses, two Q courses, and second language through elementary level 2. In addition to the Common Curriculum requirements, students must take a course in U.S. History (HIST 1501 or 1502) and PSYC 1100.

2. Complete a SUBJECT AREA MAJOR in Biological Sciences consisting of a minimum of thirty-six (36) credits in natural sciences courses at the 2000's level or above. This includes a minimum of twenty-four (24) credits of 2000's level or above courses completed in the biological sciences and closely related subject areas. Up to twelve (12) credits may be completed in related areas. Six (6) credits taken at the 1000's level may be included with permission of the science education advisor.

   An adequate background in chemistry, physics, and mathematics is required.

3. Complete the following PROFESSIONAL EDUCATION REQUIREMENTS:

EDCI 3100/W – Multicultural Education, Equity and Social Justice	3 credits
EPSY 3010 – Educational Psychology	3 credits
EGEN 3100 – Seminar/Clinic: The Student as Learner	3 credits
EPSY 3110 – Exceptionality	2 credits
EDCI 3213 – Introduction to Secondary Methods and Clinic - Science	3 credits
EDCI 4010 – Teaching Reading and Writing in the Content Areas	2 credits
EPSY 3125 – Classroom and Behavior Management	3 credits
EDCI 4210W – Instruction and Curriculum in the Secondary School	3 credits
EGEN 4100 – Seminar/Clinic: Methods of Teaching	3 credits
EPSY 4010 – Assessment of Learning	2 credits
EDCI 4250 – Directed Student Teaching	9 credits
EGEN 4110 – Seminar/Clinic: Analysis of Teaching	3 credits

Students must earn at least 120 credits.

MASTER OF ARTS IN CURRICULUM AND INSTRUCTION

To earn the University of Connecticut's institutional recommendation for teacher certification, students must additionally successfully complete the requirements for the Master of Arts in Curriculum and Instruction including a minimum of thirty (30) credits (two full-time semesters) of graduate level course work. Requirements are anticipated to include at least:

Content Pedagogy: EDCI 5500 – Teaching Science in the Middle & Secondary School (3 credits)
Curriculum Electives and/or Graduate Liberal Arts: (6 credits)
Language and Cultural Diversity in Education: (3 credits): *Choose one*: EDCI 5006 – Comparative and International Education, EDCI 5715 – Bilingualism and Second Language Acquisition, EDCI 5740 – Latinos and U.S. Education, EDCI 5742 – Sheltered English Instruction for English Language Learners, EDCI 5750 – Language Diversity and Literacy, EDCI 5875 – Multicultural Education, EDCI 5885 – Introduction to Critical Pedagogy, EDCI 5890 – Educational Linguistics, GERM/ALDS/CLCS 5324 – Teaching for Intercultural Citizenship & Human Rights, GERM/ALDS/CLCS 5325 – Teaching for Intercultural Citizenship and Human Rights II
Leadership: EDLR 5015 – Teacher Leadership and Organizations (3 credits)
Practicum: EDCI 5092 (3 credits fall) and EDCI 5093 (4 credits spring)
Seminar: EDCI 5094 (3 credits fall) and EDCI 5095 (3 credits spring)
Research: EPSY 5195 (1 credit fall and 1 credit spring)
Technology: EPSY 5221 – Wise Integration of Technology into Teaching and Learning Environments (1 credit)

BIOLOGY EDUCATION

SAMPLE SEMESTER SEQUENCE

SEMESTER 1	
BIOL 1108 (Also fulfills TOI-6 Lab Course)	4
CHEM 1122 – Chemical Principles and Applications	4
MATH Q pre-calculus or calculus	3 or 4
HIST 1501 or 1502 (Also fulfills TOI-5)	3

SEMESTER 2	
BIOL 1107 – Principles of Biology	4
ERTH 1050 – Earth and Life through Time with Laboratory	4
ENGL 1007 or 1010 or 1011 or 2011	4
PSYC 1100 (Also fulfills TOI-6)	3

SUMMER SESSION	
*FOREIGN LANGUAGE	8

SEMESTER 3	
CHEM 2241 – Organic Chemistry	3
CHEM 2242 – Organic Chemistry Laboratory	1
MCB 2210 – Cell Biology	3
MCB 2610 – Fundamentals of Microbiology	4
TOI-1 Creativity: Design, Expression, Innovation	3
**EPSY 3010 – Educational Psychology	3

SEMESTER 4	
PHYS 1201Q – General Physics	4
MCB 2000 – Introduction to Biochemistry	4
EEB 2245 – Evolutionary Biology	3
TOI-2 Cultural Dimensions of the Human Experience	3
TOI-3 Diversity, Equity and Social Justice	3

SEMESTER 5	
EPSY 3110 – Exceptionality (fall or spring junior year)	2
EDCI 3100/W – Multicultural Education, Equity & SJ	3
EGEN 3100 – Seminar/Clinic	3
MCB 2410 or 2400 – Genetics	3
PNB 2264 – Human Physiology and Anatomy	4

SEMESTER 6	
EPSY 3110 – Exceptionality (fall or spring junior year)	2
EDCI 3213 – Intro. to Secondary Methods & Clinic - Science	3
EDCI 4010 – Teaching Reading/Writing in the Content Areas	2
TOI-4 Environmental Literacy	3
PNB 2265 – Human Physiology and Anatomy	4
TOI Focus Area or Theme	3

SEMESTER 7	
EPSY 3125 – Classroom and Behavior Management	3
EDCI 4210W – Instruc. & Curric. in Secondary Schools	3
EGEN 4100 – Seminar/Clinic	3
Subject Area Major (2000-Level or above)	3
Subject Area Major (2000-Level or above)	3

SEMESTER 8	
EPSY 4010 – Assessment of Learning	2
EDCI 4250 – Directed Student Teaching	9
EGEN 4110 – Seminar/Clinic	3

*Required of all students not meeting the University requirements of three years of a single foreign language in high school.

**Students should take EPSY 3010 prior to semester 5, if possible, but no later than semester 6. The course is available fall, spring, summer and online.

SEMESTER 9 (Master's)	
EDCI 5092 - Practicum	3
EDCI 5094 – Seminar	3
EPSY 5195 – Research course	1
EPSY 5221 – Wise Technology (either semester)	1
Diversity course (either semester)	3
EDLR 5015 – Leadership (either semester)	3
Elective	3-6

SEMESTER 10 (Master's)	
EDCI 5093 – Practicum	4
EDCI 5095 – Seminar	3
EPSY 5195 – Research Course	1
EPSY 5221 – Wise Technology (either semester)	1
Diversity course (either semester)	3
EDLR 5015 – Leadership (either semester)	3
Elective	3-6
EDCI 5500 – Teaching Science in Middle & High School	3