

Life Sciences Certification (7-12)

Students pursuing Life Sciences Certification (7-12) through a UNH teacher education program must possess an undergraduate degree with a major in an area of Life Sciences (e.g., Biology, Environmental Studies, Botany, Physiology, etc. or an interdisciplinary life science degree). Or possess an undergraduate degree that includes coursework equivalent to an undergraduate major in the Life sciences (typically 40-48 credits or 10-12 courses).

Required Courses

BIOL 411 Introductory Biology: Molecular and Cellular

BIOL 412 Introductory Biology: Evolution, Biodiversity and Ecology **or** BIOL 409 Introductory Botany & ZOOL 412 Biology of Animals

GEN 604 Principles of Genetics

ZOOL 518 Vertebrate Morphology

ZOOL 625 Principles of Animal Physiology **or** ZOOL 628 Marine Invertebrate Evolution and Ecology

PBIO 566 Systematic Botany

BIOL 541 General Ecology

CHEM 403 General Chemistry I

CHEM 404 General Chemistry II

CHEM 651 Organic Chemistry I & CHEM 653 Organic Chemistry Lab

CHEM 652 Organic Chemistry II & CHEM 654 Organic Chemistry Lab **or** CHEM 545 Organic Chemistry & 546 Organic Chemistry Lab **or** BMCB 658 General Biochemistry & BMCB 659 General Biochemistry Lab

Recommended

BMCB 605 Eukaryotic Cell and Developmental Biology

BIOL 528 Applied Biostatistics I

MATH 424B Calculus for Life Sciences

Education course requirements

*EDUC 500/935A Exploring Teaching

EDUC 605 Educational Perspectives in Critical Times

EDUC 701/801 Human Development & Learning: Educ Psyc

EDUC 707/807 Teaching Reading through the Content Areas

EDUC 751B/851B Educating Exceptional Learners: Secondary

EDUC 791/891 Methods of Teaching Secondary School Science

EDUC 900A & EDUC 901A Internship & Seminar in Teaching (2 semesters Fall and Spring)

*Indicates course work must be completed before the internship

Any Education course taken for a teacher licensure requirement must be completed with a grade of **B-** or better. This applies to any courses from other departments that have been designated as equivalent to an Education course.

Degrees (Minimum of 32 Graduate credits)

M.Ed. In addition to the 12 credit internship, 10 graduate credits must be UNH Education courses. The remaining graduate credits can be in Education, Life Sciences or another department.	M.A.T. In addition to the 12 credit internship, three graduate level courses (9-12 credits) must be in Life Sciences. The remaining graduate credits can be in Life Sciences, Education or another department.
--	--

Admission to the M.Ed. or M.A.T. is competitive and requires submission of an application to the UNH Graduate School. This includes official transcripts, scores from the Praxis Core exam, personal statement and three letters of recommendations. Thirty-two (32) Graduate credits are the minimum for either degree.

For questions regarding Science course requirements contact Professor Melissa Aikens at melissa.aikens@unh.edu For questions regarding Education course requirements contact Cindy Glidden at cindy.glidden@unh.edu

Life Science course requirements for students who have completed a baccalaureate degree at a school other than UNH

Students seeking Life Sciences Certification(7-12) through a UNH teacher education program must possess an undergraduate degree with a major in an area of Life Sciences (e.g., Biology, Environmental Studies, Botany, Physiology, etc. or an interdisciplinary life science degree). Or possess an undergraduate degree that includes coursework equivalent to an undergraduate major in the Life sciences (typically 40-48 credits or 10-12 courses).

BIOL 411 Introductory Biology: Molecular and Cellular

Equivalent course_____

BIOL 412 Introductory Biology: Evolution, Biodiversity and Ecology

or BIOL 409 Introductory Botany & ZOOL 412 Biology of Animals

Equivalent course_____

GEN 604 Principles of Genetics

Equivalent course_____

ZOOL 518 Vertebrate Morphology

Equivalent course_____

ZOOL 625 Principles of Animal Physiology **or** ZOOL 628 Marine Invertebrate Evolution and Ecology

Equivalent course_____

PBIO 566 Systematic Botany

Equivalent course_____

BIOL 541 General Ecology

Equivalent course_____

CHEM 403 General Chemistry I

Equivalent course_____

CHEM 404 General Chemistry II

Equivalent course_____

CHEM 651 Organic Chemistry I & CHEM 653 Organic Chemistry Lab

Equivalent courses_____

CHEM 652 Organic Chemistry II & CHEM 654 Organic Chemistry Lab **or** CHEM 545 Organic Chemistry & 546 Organic Chemistry Lab **or** BMCB 658 General Biochemistry & BMCB 659 General Biochemistry Lab

Equivalent courses_____

Recommended

BMCB 605 Eukaryotic Cell and Developmental Biology

Equivalent course_____

BIOL 528 Applied Biostatistics I

Equivalent course_____

MATH 424B Calculus for Life Sciences

Equivalent course_____