

Natural Science (NAT)
Physical Sciences & Mathematics Department
School of Natural & Social Sciences
Carhart Science Building

The field endorsement in Natural Science will qualify the student to teach courses in General Science, Life Sciences, Physical Sciences, Chemistry, Physics, Biology and Earth Science for grades 7-12 in Nebraska.

In addition to General Education requirements, students must meet the computer literacy requirements of the Math and Sciences departments. NAT 112 Introduction to Personal Computers or any course with a CSC prefix meets this requirement.

Field Endorsement in Natural Sci. (BA or BS) 66 hours

Natural Science field endorsement students must complete MAT 130 Pre-Calculus Math (5) or both MAT 121 College Algebra (3) and MAT 122 Applied Trigonometry (1) to satisfy the Block 2 Mathematics General Education requirement.

Completion of a total of 66 hours of Biology, Chemistry, Earth Science, Physics to include:

BIO	110 Biology Concepts.....	4
	200 Zoology.....	4
	393 Biology Laboratory Techniques.....	1
CHE	106 General Chemistry I.....	4
	107 General Chemistry II.....	4
	393 Laboratory Techniques.....	1
EAS	110 Introduction to Meteorology.....	4
	120 Introduction to Geology.....	4
PHY	201 General Physics I.....	3
	202 General Physics II.....	3
	321 Physics Laboratory I.....	1
	322 Physics Laboratory II.....	1
	393 Physics Laboratory Techniques.....	1

BIO, CHE, EAS, PHY electives to combine with the above to total at least 24 hours in one area, 15 hours each in two other areas, and 12 hours in the fourth area.....31

A total of 24 cr hrs from all the above course work must be upper level.

EDU 409 Science Content Area Methods and Materials is required. No additional endorsement is required for a Nebraska Teaching Certificate.

Undergraduate Courses

NAT 112 Introduction to Personal Computers (1) A hands-on introduction to a variety of computer applications and services typically found on personal computers and the WSC computer network. Topics include operating system fundamentals, electronic mail, word processing, spreadsheets, presentation software and the Internet.

NAT 280 Life Science for Elementary Education (3) Meets life science general education requirement of Elementary Education majors. Integrated biology and chemistry lecture/laboratory course for elementary education students and is not applicable to any major, minor or endorsement in any math or science area. Topics to include atomic structure and bonding, physical and chemical changes, energy transfer, origin of the universe and the life of stars, scientific method and problem solving, cell structure, evolution, multicellular organization, classification of living things, photosynthesis, respiration, reproduction, selected topics in biochemistry, genetics, botany, and microbiology, ecology and entomology. (2 hours of lecture and 2 hours of laboratory) Intended for Early Childhood Unified Education, Elementary Education, Middle Level Education, and Special Education majors.

NAT 281 Physical Science for Elementary Education (3) Meets the physical science general education requirement of Elementary Education majors. Integrated physics, earth science and astronomy lecture/laboratory course for elementary education students and is not applicable to any major, minor or endorsement in any math or science area. Topics to include force and motion, Newton's laws and playground physics, space science and rocketry, sound and light, rocks, minerals, plate tectonics and geology of Nebraska, weather and currents, the Water cycle and pollution, and Internet for Science Educators. (2 hours of lecture and 2 hours of laboratory) Intended for Early Childhood Unified Education, Elementary Education, Middle Level Education, and Special Education majors.

NAT 421 Scientific Communications (3) Analysis of common English words and technical terms in biology, chemistry, geology, and medicine that have derivation from Latin and Greek. Recommended for science and non-science majors and for all students in health-related areas.

Eligible seniors may enroll in 500 level graduate courses. Graduate Courses

NAT 521 Scientific Communication (3) Analysis of common English words and technical terms in biology, chemistry, geology and medicine that have derivation from Latin and Greek. Students will complete their own lexicon and give a formal class presentation.

NAT 558 Field Studies in Natural History (3) On-site study of the geology, ecology, flora, and fauna of a selected site.

NAT 600 Current Science Topics (1) Can be repeated up to 4 credit hours.