Nebraska Wesleyan University

Catalog 2016-2017

Major:

Science Education (B.A., B.S.)

Departments/Programs: Education (Undergraduate)

Science Education Major (59 hours)

BIO 1400FYW Introduction to Biological Inquiry 4 hours BIO 2200 Genetics and Cell Biology 4 hours BIO 2300 Ecology and Evolution 4 hours BIO 3800 Molecular Genetics and BIO 3800 Molecular Genetics and BIO-3850 4 hours BIO 3800 Molecular Genetics and BIO-3850 Molecular Principles I and CHEM 1110 Chemical Principles I Laboratory 4 hours CHEM 1110 Chemical Principles I Laboratory 4 hours CHEM 2100 Organic Chemistry I and CHEM 2110 Organic Chemistry I Laboratory 4 hours CHEM 2110 Organic Chemistry II: Synthesis and Mechanisms and CHEM 2110 Organic Chemistry II Laboratory 4 hours CHEM 1120 Chemical Principles II and CHEM 1120 Chemical Principles II Laboratory 3 hours CHEM 3110 Biochemistry 3 hours PHYS 1600 Principles of Physics I or PHYS 1200 General Physics I or PHYS 2000 General Physics II 4 hours PHYS 1200 Energy and the Global Environment and PHYS 1200 General Physics II 4 hours PHYS 1100 Introduction to Geology 4 hours PHYS 1300 Astronomy 4 hours PHYS 1400 Introduction to Meteorology 4 hours EDUC 3280 Methods for Teaching Science in 7-12 3 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	Required Biology Courses	16 hours
BIO 2300 Ecology and Evolution	BIO 1400FYW Introduction to Biological Inquiry	4 hours
BIO 3800 Molecular Genetics and BIO-3850 Required Chemistry Courses A hours H	BIO 2200 Genetics and Cell Biology	4 hours
BIO-3850 Required Chemistry Courses CHEM 1110 Chemical Principles I and CHEM 1110 Chemical Principles I Laboratory CHEM 2100 Organic Chemistry I and CHEM 2110 Organic Chemistry II Laboratory CHEM 2110 Organic Chemistry II. Synthesis and Mechanisms and CHEM 2110 Organic Chemistry II. Synthesis and Mechanisms and CHEM 2110 Organic Chemistry II. Synthesis and Mechanisms and CHEM 2110 Organic Chemistry II. Laboratory CHEM 2110 Organic Chemistry II. Laboratory CHEM 2110 Organic Principles II and CHEM 1120 Chemical Principles II Laboratory CHEM 3410 Biochemistry CHEM 3410 Biochemistry Required Physics Courses 12 hours PHYS 1600 Principles of Physics I or PHYS 1700 Principles of Physics I or PHYS 1700 Principles of Physics II or PHYS 1700 Principles of Physics II or PHYS 1200 General Physics II PHYS 1200 Energy and the Global Environment and 4 hours PHYS-1200L Required Earth Science Courses 12 hours PHYS 1100 Introduction to Geology 4 hours PHYS 1300 Astronomy 4 hours PHYS 1400 Introduction to Meteorology 4 hours PHYS 1400 Introduction to Meteorology 5 Apours EDUC 3280 Methods for Teaching Science in 7-12 3 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	BIO 2300 Ecology and Evolution	4 hours
CHEM 1110 Chemical Principles I and CHEM 1110 Chemical Principles I Laboratory CHEM 2100 Organic Chemistry I and CHEM 2100 Organic Chemistry I Laboratory CHEM 2100 Organic Chemistry II: Synthesis and Mechanisms and CHEM 2110 Organic Chemistry III: Synthesis and Mechanisms and CHEM 2110 Organic Chemistry II Laboratory CHEM 2110 Organic Chemistry II Laboratory CHEM 1120 Chemical Principles II and CHEM 1120 Chemical Principles II Laboratory CHEM 1120 Chemical Principles II Laboratory CHEM 3410 Biochemistry Required Physics Courses PHYS 1600 Principles of Physics I or PHYS 1700 Principles of Physics I or PHYS 2000 General Physics II or PHYS 2100 General Physics II PHYS 1700 Principles of Physics II or PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology 4 hours PHYS 1300 Astronomy 4 hours PHYS 1400 Introduction to Meteorology 4 hours Required Methods Course BUUC 3280 Methods for Teaching Science in 7-12 3 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours		4 hours
CHEM 1110L Chemical Principles I Laboratory CHEM 2100 Organic Chemistry I and CHEM 2100L Organic Chemistry II. Synthesis and Mechanisms and CHEM 2110L Organic Chemistry III. Synthesis and Mechanisms and CHEM 2110L Organic Chemistry III. Synthesis and Mechanisms and CHEM 2110L Organic Chemistry III. Laboratory CHEM 1120 Chemical Principles II and 4 hours CHEM 1120L Chemical Principles II Laboratory CHEM 3410 Biochemistry 3 hours Required Physics Courses 12 hours PHYS 1600 Principles of Physics I or PHYS 2000 General Physics I or PHYS 2000 General Physics II or PHYS 2100 General Physics II or PHYS 2100 General Physics II or PHYS 1700 Principles of Physics II or PHYS 1700 Principles of Physics II or PHYS 1700 Interduction to Geology 4 hours PHYS 1100 Introduction to Geology 4 hours PHYS 1100 Introduction to Geology 4 hours PHYS 1300 Astronomy 4 hours PHYS 1400 Introduction to Meteorology 4 hours PHYS 1400 Introduction to Meteorology 5 hours EDUC 3280 Methods for Teaching Science in 7-12 3 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	Required Chemistry Courses	19 hours
CHEM 2100L Organic Chemistry II: Synthesis and Mechanisms and 4 hours CHEM 2110 Organic Chemistry II: Synthesis and Mechanisms and 4 hours CHEM 1120 Chemical Principles II and 4 hours CHEM 1120L Chemical Principles II Laboratory CHEM 3410 Biochemistry 3 hours Required Physics Courses 12 hours PHYS 1600 Principles of Physics I or 4 hours PHYS 1700 Principles of Physics II or 4 hours PHYS 1700 Principles of Physics II or 4 hours PHYS 1200 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L 4 hours Required Earth Science Courses 12 hours PHYS 1100 Introduction to Geology 4 hours PHYS 1300 Astronomy 4 hours PHYS 1400 Introduction to Meteorology 4 hours Required Methods Course 3 hours EDUC 3280 Methods for Teaching Science in 7-12 3 hours Senior Comprehensive 15 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours		4 hours
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PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology 4 hours PHYS 1300 Astronomy 4 hours PHYS 1400 Introduction to Meteorology 4 hours Required Methods Course 5 DUC 3280 Methods for Teaching Science in 7-12 3 hours EDUC 4870 Supervised Teaching in the Secondary School 4 hours 14 hours	Required Physics Courses	12 hours
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PHYS 1300 Astronomy PHYS 1400 Introduction to Meteorology 4 hours Required Methods Course 3 hours EDUC 3280 Methods for Teaching Science in 7-12 3 hours Senior Comprehensive EDUC 4870 Supervised Teaching in the Secondary School 14 hours	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and	4 hours
PHYS 1400 Introduction to Meteorology Required Methods Course 3 hours EDUC 3280 Methods for Teaching Science in 7-12 3 hours Senior Comprehensive 15 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L	4 hours
Required Methods Course 3 hours EDUC 3280 Methods for Teaching Science in 7-12 3 hours Senior Comprehensive 15 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses	4 hours 4 hours 12 hours
EDUC 3280 Methods for Teaching Science in 7-12 Senior Comprehensive 15 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology	4 hours 4 hours 12 hours 4 hours
Senior Comprehensive 15 hours EDUC 4870 Supervised Teaching in the Secondary School 14 hours	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology PHYS 1300 Astronomy	4 hours 4 hours 12 hours 4 hours 4 hours 4 hours
EDUC 4870 Supervised Teaching in the Secondary School 14 hours	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology PHYS 1300 Astronomy PHYS 1400 Introduction to Meteorology	4 hours 4 hours 12 hours 4 hours 4 hours 4 hours 4 hours
	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology PHYS 1300 Astronomy PHYS 1400 Introduction to Meteorology Required Methods Course	4 hours 4 hours 12 hours 4 hours 4 hours 4 hours 4 hours 3 hours
EDUC 4990 Student Teaching Seminar 1 hour	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology PHYS 1300 Astronomy PHYS 1400 Introduction to Meteorology Required Methods Course EDUC 3280 Methods for Teaching Science in 7-12	4 hours 4 hours 12 hours 4 hours 4 hours 4 hours 4 hours 3 hours 3 hours
	PHYS 2000 General Physics I PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II PHYS 1200 Energy and the Global Environment and PHYS-1200L Required Earth Science Courses PHYS 1100 Introduction to Geology PHYS 1300 Astronomy PHYS 1400 Introduction to Meteorology Required Methods Course EDUC 3280 Methods for Teaching Science in 7-12 Senior Comprehensive	4 hours 4 hours 12 hours 4 hours 4 hours 4 hours 4 hours 3 hours 3 hours 15 hours