

# MIDDLE LEVEL SCIENCE EDUCATION MAJOR, BACHELOR OF SCIENCE (BS)

## Secondary Education Program Prerequisites

All prerequisite courses must have been completed within the last 6 years.

A grade  $\geq$ B- in all prerequisite courses is required for admission to the Education program.

CMST 201 or CMST 340	PUBLIC SPEAKING INTERCULTURAL COMMUNICATION	5
EDUC 201	INTRODUCTION TO EDUCATION	3
ENGL 201	COLLEGE COMPOSITION: ANALYSIS, RESEARCH AND DOCUMENTATION (or approved equivalent)	5
SOST 300	PEOPLES AND GOVERNANCE OF THE PACIFIC NORTHWEST	5
SPED 363	INTRODUCTION TO SPECIAL EDUCATION	4
PSYC 204	EDUCATIONAL PSYCHOLOGY	5
Quantitative and Symbolic Reasoning proficiency*		5
<b>Total Credits</b>		<b>32</b>

\* Quantitative and Symbolic Reasoning courses (<http://catalog.ewu.edu/undergraduate-degree/#mathcompproficiencytext>)

**Grade Requirements:** A cumulative GPA  $\geq$ 2.8 for all courses,  $\geq$ C in each required middle level science education course,  $\geq$ B- in each required education course.

## Required Middle Level Science Education Courses

BIOL 115	LIFE SCIENCE FOR TEACHERS	5
CHEM 161 & 161L	GENERAL CHEMISTRY FOR THE HEALTH SCIENCES and GENERAL CHEMISTRY LABORATORY FOR THE HEALTH SCIENCES	5
GEOS 113	THE EARTH'S CLIMATE AND WEATHER	5
GEOS 115	EARTH SCIENCE FOR TEACHERS	5
GEOS 204	HOT EARTH: PEOPLE AND CLIMATE CHANGE	5
MATH 141	PRECALCULUS I	5
PHYS 115	INVESTIGATING PHYSICAL SCIENCE	5
PHYS 121 or PHYS 126	DESCRIPTIVE ASTRONOMY MAKING SENSE OF THE COSMOS	5
Choose one sequence:		15
BIOL 171 & 171L & BIOL 172 & BIOL 172L & BIOL 173 & BIOL 173L	BIOLOGY I and BIOLOGY I LAB and BIOLOGY II and BIOLOGY II LAB and BIOLOGY III and BIOLOGY III LAB	
CHEM 171 & 171L & CHEM 172 & CHEM 172L & CHEM 173 & CHEM 173L	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LABORATORY I and GENERAL CHEMISTRY II and GENERAL CHEMISTRY LABORATORY II and GENERAL CHEMISTRY III and GENERAL CHEMISTRY LABORATORY III	
PHYS 131 & PHYS 132 & PHYS 133 & PHYS 161 & PHYS 162 & PHYS 163	INTRODUCTORY PHYSICS I and INTRODUCTORY PHYSICS II and INTRODUCTORY PHYSICS III and MECHANICS LABORATORY and HEAT AND OPTICS LABORATORY and ELECTRONICS LABORATORY I	

## Required Education Courses

EDUC 303	FOUNDATIONS OF ASSESSMENT	3
EDUC 309	FOUNDATIONS OF SECONDARY CLASSROOM MANAGEMENT	3
EDUC 341	SECONDARY STRATEGIES, MANAGEMENT, ASSESSMENT	3

EDUC 386A	FIELD EXPERIENCE AND PRACTICUM	3
EDUC 386B	FIELD EXPERIENCE AND PRACTICUM	3
EDUC 413	CONTENT AREA LITERACY: MANAGEMENT AND ASSESSMENT FOR SECONDARY EDUCATION CANDIDATES	3
EDUC 417	CULTURE OF MIDDLE SCHOOL	3
EDUC 426	SECONDARY STUDENT TEACHING 5-12	12
EDUC 427	GENERAL STUDENT TEACHING K-12	3-15
SCED 390	SCIENCE TEACHING METHODS	5
<b>Required Senior Capstone</b>		
SCED 490A	SCIENCE TEACHING CAPSTONE SEMINAR	3
SCED 490B	SCIENCE TEACHING CAPSTONE FIELD APPLICATION	2
<b>Total Credits</b>		<b>101-113</b>

### University Competencies and Proficiencies

- English (<http://catalog.ewu.edu/undergraduate-degree/#newitemtext>)
- Quantitative and Symbolic Reasoning (<http://catalog.ewu.edu/undergraduate-degree/#mathcompproficiencytext>)
- Placement and Clearance (<http://catalog.ewu.edu/placement/>)
- Prior Learning/Sources of Credit AP, CLEP, IB (<http://catalog.ewu.edu/prior-learning/>)

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### General Education Requirements (<http://catalog.ewu.edu/undergraduate-degree/#generaleducationrequirementstext>) (GER)

- Minimum Credits—180 cumulative credit hours
  - 60 upper-division credits (300 level or above)
  - 45 credits in residence (attendance) at Eastern, with at least 15 upper-division credits in major in residence at Eastern
- Minimum Cumulative GPA  $\geq 2.0$

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### Breadth Area Core Requirements (BACR)

- Humanities and Arts (<http://catalog.ewu.edu/undergraduate-degree/#humanitiesandfineartsgecrtext>)
- Natural Sciences (<http://catalog.ewu.edu/undergraduate-degree/#naturalsciencesgecrtext>)
- Social Sciences (<http://catalog.ewu.edu/undergraduate-degree/#socialsciencesgecrtext>)

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### University Graduation Requirements (<http://catalog.ewu.edu/undergraduate-degree/#universitygraduationrequirementstext>) (UGR)

- Diversity Course List (<http://catalog.ewu.edu/undergraduate-degree/#cultureandgenderdiversityintheuslisttext>)
- World Language (<http://catalog.ewu.edu/undergraduate-degree/#worldlanguagetext>) (for Bachelor of Arts)
- Global Studies Course List (<http://catalog.ewu.edu/undergraduate-degree/#internationalstudiesrequirementtext>)
- Minor or Certificate (<http://catalog.ewu.edu/undergraduate-degree/#majorminororcertificateugrtext>)
- Senior Capstone Course List (<http://catalog.ewu.edu/undergraduate-degree/#capstonecourselisttext>)

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Application for Graduation (use EagleNET (<https://inside.ewu.edu/eaglenet/>)) must be made at least two terms in advance of the term expected to graduate (undergraduate and post-baccalaureate).

Use the Catalog Archives (<http://catalog.ewu.edu/archives/>) to determine *two important catalog years*.

1. The catalog *in effect at the student's first term* of current matriculation is used to determine **BACR** (Breadth Area Core Requirements) and **UGR** (Undergraduate Graduation Requirements).
2. The catalog *in effect at the time the student declares a major or minor* is used to determine the program requirements.

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### Students who earn a BS in Middle Level Science Education from EWU should be able to:

- apply science and engineering practices in NGSS;
- appropriately respond to potential safety hazards in different learning environments, e.g., laboratory, classroom, field;
- explain how cross-cutting ideas bridge disciplinary boundaries, uniting core ideas throughout the fields of science and engineering;

- explain the disciplinary core ideas of earth and space, life and physical science and guide the learning of others in key principles of each of the science domains outlined in the Next Generation Science Standards;
- incorporate instructional materials and teaching strategies to a community of diverse students.