

## FACULTY AGENDA ITEM

Date: 3/16/2020

Submitted by: *Cherry Steffen x 1946*

SUBJECT: *B.Ed. Middle Grades STEM*

### Description:

The focus of the Middle Grades STEM Education program is on science and mathematics education and on integrating STEM throughout the curriculum. The program prepares students for licensure in both mathematics and science education in grades 6-8. Candidates for the degree and licensure in Middle Grades STEM Education are advised by the faculty of the Department of Education.

### Pre-admission courses required for formal admission to teacher education:

ED 155 Teaching, Learning and Leadership

ED 285 Educational Psychology

### Education Core Courses:

ED 165 ED 1: Examining Teaching as a Profession

ED 275 ED 2: Exploring Teaching as a Profession

ED 295 ED 3: Experiencing Teaching as a Profession

ED 395 ED 4: Extending Teaching as a Profession

ED 354 Curriculum and Assessment

ED 302 Teaching Exceptional Learners

ED 420 Student Teaching

### Content/General Education/University Requirements

#### Arts and Humanities:

EN 101 First Year Writing

EN 300 Advanced College Writing (Teaching Emphasis)

CN 150 Public Speaking

2 Humanities Electives (from Approved General Education List)

#### Social Sciences:

PY 100 Basic Concepts in Psychology

PY 211 Adolescent Psychology

SO 101 Social Problems

#### Mathematics and Natural Sciences:

AS 104 Life in the Universe

BI 100 Introduction to Biology

MA 116 College Algebra

MA 131 Trig/Calculus

MA 140 Statistics

MA 204 Number Theory and Discrete Mathematics

MA 230 Math for Middle and Secondary Teachers

MA 320 Mathematics for Middle School Teachers  
MA 381 History and Literature of Mathematics  
PS 108 Physical Science

STEM Courses:

ED 217 Introduction to STEM and STEM Education  
CH 317 Chemistry for STEM Educators  
ED 314 Chemistry Methods for STEM Educators  
PS 318 Earth/Space Science for STEM Educators  
ED 318 Earth/Space Science Methods for STEM Educators  
BI 319 Biology for STEM Educators  
ED 319 STEM Practicum I  
EG 320 Engineering for STEM Educators I  
ED 321 STEM Practicum II

Rationale:

This program will prepare students to teach both mathematics and science at the middle grades level.

Financial Implications:

None

Proposed Effective Date: *Fall 2020*

Request for Action: *Approval by Academic Affairs, Faculty Senate, General Faculty, and WUBOR.*

Approved by: *AAC on date 3/23/2020*

*FAC on date*

*Faculty Senate on date*

Attachments Yes  No

# COLLEGE OF ARTS AND SCIENCES NEW PROGRAM REVIEW FORM

	Chair's Signature	Recommendation	Review Date
<b>Department</b>	<u>Cherry Steffen</u>	<u>Approve</u>	<u>2020-02-14</u>
<b>Division</b>	<u>Roy Wohl</u>	<u>Approve</u>	<u>2020-02-17</u>
<b>Dept. of Educ.</b>	<u>Cherry Steffen</u>	<u>Approve</u>	<u>2020-02-17</u>
<small>(If relates to teacher certification program.)</small>			
<b>Dean</b>	<u>Laura Stephenson</u>	<u>Approve</u>	<u>2020-02-17</u>
<b>Curriculum Committee</b>	<u>Kerry Wynn</u>	<u>Approve</u>	<u>2020-02-25</u>
<b>Accepted by CFC</b>	<u>Michaela Saunders</u>	<u>Approve</u>	<u>2020-03-03</u>
<b>CAS Faculty</b>	_____	_____	_____

**Approved By:**      **Faculty Senate** \_\_\_\_\_      **University Faculty** \_\_\_\_\_      **WU Board of Regents** \_\_\_\_\_

1. Title of Program.

BEEd in Middle Grades STEM Education (CIP: 13.1203)

2. Rationale for offering this program.

This program will prepare students to teach both mathematics and science at the middle grades level.

3. Exact proposed catalog description.

The focus of the Middle Grades STEM Education program is on science and mathematics education and on integrating STEM throughout the curriculum. The program prepares students for licensure in both mathematics and science education in grades 6-8.

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ED 314 Chemistry Methods for STEM Educators  
PS 318 Earth/Space Science for STEM Educators  
ED 318 Earth/Space Science Methods for STEM Educators BI  
319 Biology for STEM Educators  
ED 319 STEM Practicum I  
EG 320 Engineering for STEM Educators I  
ED 321 STEM Practicum II

4. List any financial implications.

None

5. Are any other departments affected by this new program? Yes

Courses for this degree will be offered in the education department as well as in the Mathematics, Chemistry, Biology and Physics Departments.