

FACULTY AGENDA ITEM

Date: November 20, 2023

Submitted by: Cherry Steffen x1943

SUBJECT: Program Revisions: Bachelor of Education/ Middle Grades STEM

Description: Proposal for Bachelor of Education degree changes/ Middle Grades STEM

Summary of Changes:

- 1) Deleted MA 230
- 2) Deleted MA 381 and replaced it with MA 281
- 3) Deleted PS 318 and EG 320 and replaced with PS XXX (elective) and another physics or engineering elective
- 4) Deleted ED 321
- 5) Added MA 200 and MA 201
- 6) Replaced ED 420 with ED 415 (middle school student teaching instead of elementary school)
- 7) Deleted EN 101 and EN 300

Rationale:

- 1) Math changes were made due to changes in the math courses required for all middle level math education programs.
- 2) MA 381 has been replaced with MA 281 - change in math requirement
- 3) PS 318 and EG 320 are not currently offered due to low numbers in the program. These will be replaced with acceptable replacements unless they are offered.
- 4) ED 321 is required for elementary education majors only.
- 5) Changes in the middle level mathematics education requirements
- 6) Middle Level Student Teaching (ED 415) is required. This replaces the ED 420 elementary level student teaching course.
- 7) Changes due to General Education revisions.

Financial Implications: No additional costs are anticipated.

Proposed Effective Date: Fall 2024

Request for Action: *Approval by AAC/FS/ Gen Fac, etc*

Approved by: *AAC on 11/27/2023*

Faculty Senate on date

Attachments Yes ☒ No ☐

Program Change Request

Date Submitted: 11/07/23 4:07 pm

Viewing: **ED-MG-STEM : Bed in Middle Grades STEM Ed**

Last approved: 06/20/23 3:31 pm

Last edit: 11/28/23 1:01 pm

Changes proposed by: Cherry Steffen (cherry.steffen)

Catalog Pages Using this Program

[Middle Grades STEM, BEd](#)

| | |
|---|---|
| Change Type | Significant |
| Summarize Changes and Include Rationale | <p>Format of degree requirements were changed in accordance with catalog standardization efforts.</p> <p>Summary of Changes:</p> <ol style="list-style-type: none">1) Deleted MA 2302) Deleted MA 381 and replaced it with MA 2813) Deleted PS 318 and EG 320 and replaced with PS XXX (elective) and another physics or engineering elective4) Deleted ED 3215) Added MA 200 and MA 2016) Replaced ED 420 with ED 415 (middle school student teaching instead of elementary school)7) Deleted EN 101 and EN 300 <p>Rationale for Changes:</p> <ol style="list-style-type: none">1. Math changes were made due to changes in the math courses required for all middle level math education programs.2. MA 381 has been replaced with MA 281 - change in math requirement3. PS 318 and EG 320 are not currently offered due to low numbers in the program. These will be replaced with acceptable replacements unless they are offered.4. ED 321 is required for elementary education majors only.5. Changes in the middle level mathematics education requirements6. Middle Level Student Teaching (ED 415) is required. This replaces the ED 420 elementary level student teaching course.7. Changes due to General Education revisions. |

General Information

| | |
|---|------------------------------|
| Effective Catalog Edition | 2024-2025 |
| Department | Education |
| College | School of Applied Studies |
| Degree Level | Undergraduate |
| Program Title | Bed in Middle Grades STEM Ed |
| Degree to be Offered | Bachelor of Education (BED) |
| Is this program offered completely online? | |
| Does this program lead to a teaching certification? | Yes |
| Program Code | ED-MG-STEM |
| Is this program an interdisciplinary program? | No |

In Workflow

1. Acad Ops
2. ED Chair
3. Library
4. SAS Curr Policy Chair
5. SAS Dean
6. SAS Fac Council Chair
7. Governance Check
8. AA Committee
9. Faculty Senate
10. General Faculty
11. WUBOR
12. Final Acad Ops
13. Registrar

Approval Path

1. 11/07/23 4:39 pm
Beth O'Neill
(beth.oneill):
Approved for Acad Ops
2. 11/08/23 10:21 am
Cherry Steffen
(cherry.steffen):
Approved for ED Chair
3. 11/08/23 11:40 am
Sean Bird
(sean.bird):
Approved for Library
4. 11/14/23 2:09 pm
Michelle Shipley
(michelle.shipley):
Approved for SAS Curr Policy Chair
5. 11/17/23 3:33 pm
Zach Frank
(zach.frank):
Approved for SAS Dean
6. 11/17/23 4:11 pm
Michelle Shipley
(michelle.shipley):
Approved for SAS Fac Council Chair
7. 11/17/23 4:34 pm
Holly Broxterman
(holly.broxterman):
Approved for Governance Check
8. 11/28/23 1:01 pm
Holly Broxterman
(holly.broxterman):
Approved for AA Committee

History

1. Apr 21, 2022 by
clmig-jwilling

2. Oct 26, 2022 by
Holly Broxterman
(holly.broxterman)

3. Jun 20, 2023 by
Holly Broxterman
(holly.broxterman)

Admission and Curriculum

- Admission Criteria
- Total Number of
- Semester Credit
- Hours for the
- Degree
- Curriculum

In addition to the requirements stated below, students must complete 34-35 hours of General Education, all requirements for a Bachelor of Education degree, and any additional hours needed to reach the minimum 120 credit hours required for graduation. Some of the courses below may also fulfill general education or other degree requirements.

Degree Requirements

Required Courses Inside Department

Pre-Admission Professional Education Courses

| | | |
|---------------|---------------------------------------|----------|
| <u>ED 155</u> | <u>Teaching, Learning, Leadership</u> | <u>3</u> |
| <u>ED 285</u> | <u>Educational Psychology</u> | <u>3</u> |

Post-Admission CORE Education Courses

| | | |
|---------------|---|-----------------|
| <u>ED 165</u> | Ed. 1, Examining Teaching as a Profession: Diversity 1, Literacy 1, Technology 1 ¹ | 3 |
| <u>ED 275</u> | Ed. 2 Exploring Teaching as a Profession (Classroom Management 1, Diversity 2, Technology 2) Ed. 2 ¹ | 3 |
| <u>ED 295</u> | Ed. 3 Experiencing Teaching as a Profession (Classroom Management 2, Diversity 3, Literacy 2) ² | 3 |
| <u>ED 302</u> | Teaching Exceptional Learners | 3 |
| <u>ED 354</u> | Curriculum and Assessment | 3 |
| <u>ED 420</u> | K-6 Student Teaching | 8-12 |
| <u>ED 395</u> | Ed. 4 Extending Teaching as a Profession (Classroom Management 3, Literacy 3, Technology 3) ² | 3 |
| <u>ED 415</u> | <u>5th-8th Grade Student Teaching</u> | <u>12</u> |

Middle Grades STEM Courses

| | | |
|-----------------|---------------------------------------|-----------|
| <u>ED 217</u> | <u>Introduction to STEM Education</u> | <u>3</u> |
| <u>ED 314</u> | <u>Chemistry Methods for STEM Edu</u> | <u>3</u> |
| <u>ED 318</u> | <u>Earth/Space Science for STEM E</u> | <u>3</u> |
| <u>ED 319</u> | <u>STEM Practicum I</u> | <u>1</u> |
| <u>Subtotal</u> | | <u>46</u> |

Required Courses Outside Department

| | | |
|---------------|---|----------|
| <u>AS 104</u> | <u>Life in the Universe</u> | <u>3</u> |
| <u>BI 100</u> | <u>Human Biology</u> | <u>3</u> |
| <u>BI 101</u> | <u>Human Biology Laboratory</u> | <u>2</u> |
| <u>BI 319</u> | <u>Biology for STEM Educators</u> | <u>3</u> |
| <u>CH 317</u> | <u>Chemistry for STEM Educators I</u> | <u>3</u> |
| <u>CN 150</u> | <u>Public Speaking</u> | <u>3</u> |
| <u>MA 116</u> | <u>College Algebra</u> | <u>3</u> |
| <u>MA 117</u> | <u>Trigonometry</u> | <u>3</u> |
| <u>MA 140</u> | <u>Statistics</u> | <u>3</u> |
| <u>MA 200</u> | <u>Number & Operation for Elementary Teachers</u> | <u>3</u> |
| <u>MA 201</u> | <u>Geometry, Proportion & Data Analysis for Elementary Teachers</u> | <u>3</u> |
| <u>MA 204</u> | <u>Number Theory and Discrete Math for Middle School Teachers</u> | <u>3</u> |
| <u>MA 281</u> | <u>History of Early Mathematics</u> | <u>1</u> |
| <u>MA 320</u> | <u>Mathematics for Middle School Teachers</u> | <u>3</u> |

| | | |
|--|-------------------------------------|-----------|
| <u>PS 108</u> | <u>Physical Science</u> | <u>3</u> |
| <u>PS XXX</u> | <u>Physical Science Elective</u> | <u>3</u> |
| <u>Physics or Engineering Elective</u> | | <u>3</u> |
| <u>PY 100</u> | <u>Basic Concepts in Psychology</u> | <u>3</u> |
| <u>PY 211</u> | <u>Adolescent Psychology</u> | <u>3</u> |
| <u>SO 101</u> | <u>Social Problems</u> | <u>3</u> |
| <u>Subtotal</u> | | <u>57</u> |
| Total Hours | | 103 |

¹
Must be taken concurrently.

²
=
Must be taken concurrently.

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

| | | |
|------------------------|---|--------------|
| ED 155 | Teaching, Learning, Leadership | 3 |
| ED 285 | Educational Psychology | 3 |
| Total Hours | | 0 |

~~Education Core Courses:Content/General Education/University Requirements:~~

~~University Requirements~~

| | | |
|---------------------|---|--------------|
| EN 101 | Introductory College Writing | 3 |
| EN 300 | Advanced College Writing | 3 |
| MA 116 | College Algebra¹ | 3 |
| Subtotal | | 0 |

~~Arts and Humanities~~

| | | |
|---|----------------------------|--------------|
| CN 150 | Public Speaking | 3 |
| Humanities Electives (from approved General Education List in 2 disciplines) | | 6 |
| Subtotal | | 0 |

~~Social Sciences~~

| | | |
|---------------------|---|--------------|
| PY 100 | Basic Concepts in Psychology | 3 |
| PY 211 | Adolescent Psychology | 3 |
| SO 101 | Social Problems | 3 |
| Subtotal | | 0 |

~~Mathematics and Natural Sciences~~

| | | |
|---------------------|---|--------------|
| AS 104 | Life in the Universe | 3 |
| BI 100 | Human Biology | 3 |
| MA 117 | Trigonometry | 3 |
| MA 140 | Statistics | 3 |
| MA 204 | Number Theory and Discrete Math for Middle School Teachers | 3 |
| MA 230 | Math Middle/Secondary Teachers | 4 |
| MA 320 | Mathematics for Middle School Teachers | 3 |
| MA 381 | History and Literature of Mathematics | 3 |
| PS 108 | Physical Science | 3 |
| Subtotal | | 0 |

~~STEM Courses~~

| | | |
|-------------------|---|--------------|
| ED 217 | Introduction to STEM Education | 3 |
| CH 217 | Chemistry for STEM Educators I | 3 |
| ED 314 | Chemistry Methods for STEM Edu | 3 |
| PS 318 | Earth and Space Science for STEM Educators I | 3 |

| | | |
|------------------------|---|--------------|
| ED 318 | Earth/Space Science for STEM E | 3 |
| BI 319 | Biology for STEM Educators | 3 |
| ED 319 | STEM Practicum I | 1 |
| EG 320 | Engineering for STEM Educators | 3 |
| ED 321 | STEM Practicum II | 1 |
| Subtotal | | 0 |
| Total Hours | | 0 |
| Pathway | | |

Faculty Workload Analysis (describe how the course offering schedule and anticipated enrollments correlate to faculty lines)

Supplemental Files

Reviewer **Holly Broxterman (holly.broxterman) (11/28/23 1:01 pm):** 11/27/2023 - Approved by
Comments Academic Affairs Committee.