STEM EDUCATION PROGRAM

College of Arts and Sciences

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Master of Science in Education

- STEM Education (http://catalog.unk.edu/graduate/departments/science-math-education-program/science-math-education-mse/) - Master of Science in Education Degree

Graduate Program Committee

Steele (Chair), Boeckner (MATH), Diaz (COE), Dutta (PHYS), Moser (CHEM), Simon (BIOL)

Science and Math Education (STEM)

STEM 888 – STEM Education Capstone 3 credit hours

This course is designed to culminate the student’s experience in the STEM Education program. Students will complete the comprehensive exam and a capstone project that integrates educational research, curriculum design, science/math content application, and assessment. Based on a literature evaluation of a specific concept or problem in science/math teaching, the student will develop a new curricular unit, or redesign an existing one, to be implemented in a high school or middle school science/math course that the student is teaching that semester. This unit must apply science/math content from their degree program courses and the student must assess the impact of the new/revised unit on student learning.

Prerequisite: Admission into STEM Education Program Recommended completion of TE 800 and at least 24 hrs of STEM Education degree program including 6 or more hours in Major Emphasis category.

Biology (BIOL) - Major Emphasis Courses, Supporting Coursework, and Electives

Chemistry (CHEM)- Major Emphasis Courses, Supporting Coursework, and Electives

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- Biology (BIOL) - Major Emphasis Courses, Supporting Coursework, and Electives
- Math (MATH) - Major Emphasis Courses, Supporting Coursework, Electives
- Physics/Physical Science (PHYS) - Major Emphasis Courses, Supporting Coursework, Electives

Teacher Education (TE)- Professional Components, and Electives

- Professional Component: Curriculum Course
- Research Course
- Pedagogy Course

Math (MATH) - Major Emphasis Courses, Supporting Coursework, Electives

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- Physics/Physical Science (PHYS) - Major Emphasis Courses, Supporting Coursework, Electives

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- Professional Component: Curriculum Course
- Research Course
- Pedagogy Course

Visit Biology Department Courses page (https://catalog.unk.edu/graduate/departments/biology/#coursestext) to view course offerings. Most courses can apply toward the program except for BIOL 820, BIOL 821 and BIOL 831A-F.
### STEM Education Program

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>TE 815P</td>
<td>The Effective Teacher: Enhancing Classroom Instruction</td>
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<td>TE 845</td>
<td>Contemporary Theory &amp; Practice in Reading</td>
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<td>Developing Web-Based Educational Environments</td>
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