STEM EDUCATION PROGRAM

College of Arts and Sciences
Janet Steele, Ph.D., STEM Program Director and Graduate Program Committee Chair - (308) 865-8325, steelej@unk.edu

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

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

CURRICULUM COURSE
TE 809P Curriculum Implementation 3
RESEARCH COURSE
TE 800 Education Research 3
PEDAGOGY COURSE
TE 804 Curriculum Development in Multicultural Education 3
OR
TE 886P Technology Tools for Teachers 3
ELECTIVE HOURS ONLY
TE 803 Philosophy of Education 3
TE 805P Overview of Assistive Technology 3
TE 808P Human Relations 1
TE 810 Design and Development of Instruction 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TE 815P</td>
<td>The Effective Teacher: Enhancing Classroom Instruction</td>
<td>3</td>
</tr>
<tr>
<td>TE 845</td>
<td>Contemporary Theory &amp; Practice in Reading</td>
<td>3</td>
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<tr>
<td>TE 854</td>
<td>Reading in the Content Areas</td>
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<td>TE 868</td>
<td>Copyright, Fair Use, and Ethics</td>
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<tr>
<td>TE 877</td>
<td>Developing Web-Based Educational Environments</td>
<td>3</td>
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