Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)
Course title and abbreviation change

What is the rationale for the proposed change(s)?
Shorten and simplify

What are the programmatic implications of the proposed change(s)?
(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?
None

Is approval of the request contingent upon the approval of other course or curricular program request? No

General Information

Course Bulletin Listing/Subject Area: Education:Teaching & Learning
Fiscal Unit/Academic Org: School of Teaching & Learning - D1275
College/Academic Group: Education & Human Ecology
Level/Career: Graduate
Course Number/Catalog: 8731
Course Title: Teaching and Teacher Education in STEM Education
*Previous Value: First Year STEM Doctoral Seminar: Study of Teaching and Teacher Education in STEM Education*
Transcript Abbreviation: Teach&TeachEd STEM
*Previous Value: SeminarTeach & TEd*
Course Description: Students develop the knowledge and skills necessary to critically analyze reports of educational research, current thinking and perspectives, critical issues associated with science and mathematics teacher education and teacher preparation.
Semester Credit Hours/Units: Fixed: 3

Offering Information

Length Of Course: 14 Week
Flexibly Scheduled Course: Never
Does any section of this course have a distance education component? No
Grading Basis: Letter Grade
Repeatable: No
Course Components: Seminar
Grade Roster Component: Seminar
Credit Available by Exam: No
Admission Condition Course: No
Off Campus: Never
Campus of Offering: Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites
Exclusions: Not open to students with credit for 966.23.
### Cross-Listings

#### Subject/CIP Code

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#### Quarters to Semesters

Modified or re-envisioned course that includes substantial parts of the content and learning goals of one or more quarter courses

List the current courses by number and title that are to be subsumed into proposed course

**EduTL 966.23: First Year STEM Doctoral Seminar: Study of Teaching and Teacher Education in STEM Education**

#### Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

### Course Details

#### Course goals or learning objectives/outcomes

- Compare and contrast scholarly writing, critically analyze research studies and write a critical literature review of empirically based research articles in an area of personal interest related to teaching and teacher education
- Identify the theoretical framework for research studies, describe research methods, compare and contrast studies on similar topics with different theoretical paradigms, and identify strengths and weaknesses of published research

#### Content Topic List

- Teacher education – What do professional groups recommend about STEM teacher education, preparation and continuing develop?
- Response to A Nation at Risk: The Holmes Reports on teacher education and the National Mathematics Advisory Report
- Teacher education – developing practice; aligning with contemporary reform; preservice teacher education; preparing science and mathematics teachers for diversity in the classroom
- Pedagogical content knowledge for mathematics and science teaching and learning
- Recruitment and retention issues for science and mathematics teachers
- Characteristics of teacher preparation programs for STEM teachers; Professional development for STEM teaching and learning
- International perspectives on STEM teacher preparation; US achievement on international STEM assessments

### Attachments

### Comments

- Approved by T&L GSC 1/19/2012 (by Mercerhill,Jessica Leigh on 01/19/2012 04:50 PM)
COURSE CHANGE REQUEST  
8731 - Status: PENDING  
Last Updated: Zircher, Andrew Paul  
01/20/2012

## Workflow Information

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