New Course Proposal

Date Submitted: 06/20/16 11:42 am

Viewing: **GRAD 8970 : Evidence-Based Teaching in STEM Seminar**

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**Changes proposed by: DEB0020**

**Submitter:**
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**Proposing College/School:**
- Graduate School

**Department:**
- Graduate School

**Effective Term:**
- Fall 2016

**Subject Code:**
- Graduate Studies (GRAD)

**Course Number:**
- 8970

**Justification for Graduate Credit**

This course will be offered to graduate students and post-docs, specifically to develop their ability to reach diverse learners in an active format as well as conduct research related to their teaching in post-secondary settings. This course is distinguished from an undergraduate course in that graduate students will bring their significant disciplinary knowledge (sciences, humanities, etc.) to bear on designing effective teaching interactions and measuring the efficacy of those interactions using the full-inquiry cycle and quantitative and qualitative data gathering and interpreting methodologies.

**Justification for new**

This course focuses on improving undergraduate teaching in Science, Technology, Engineering, and Math fields; the focus on these disciplines is not specifically included in existing courses. In addition, the class discussions will allow graduate students enrolled in other fields to participate. We will apply STEM-tested Teaching-As-Research methods to all disciplines represented in the
Course Title: Evidence-Based Teaching in STEM Seminar

Abbreviated Title: EBT Seminar

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Contact/Group Hours</th>
<th>Weekly or Per Term?</th>
<th>Credit Hours</th>
<th>Anticipated Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminar</td>
<td>1.5</td>
<td>Weekly</td>
<td>1</td>
<td>20</td>
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</tbody>
</table>

Can the course be repeated? Yes  
Total Credit Hours: 1

Maximum Hours: 3

Grading Type: Satisfactory/Unsatisfactory

Prerequisites: Permission from instructor.

Prerequisite Courses: 

Corequisites: 

Restrictions: Exclude Freshman  
Exclude Junior  
Exclude Sophomore

Course Description: This 1-hour seminar will help students apply core principles and learning outcomes related to evidence-based teaching including teaching as research, learning communities, and learning through diversity.

May Count Either: 

Affected Program(s): 

Overlapping or Duplication of Other Units' Offerings: 

Accessibility: Agreed - Auburn University's accessibility policies and guidelines regarding student
## Guidelines

- Accommodations and accessible electronic and information technology used in the course, will be followed.
  
  Agreed - An accessible electronic syllabus will be made available to all students.
  
  Agreed - Videos and audio-based materials selected for the course will be captioned or have a transcript available.
  
  Agreed - Accessible electronic material will be created and readily available to all students.
  
  Agreed - Textbooks or other readings will be selected early enough to ensure that accessible versions of these materials can be accessed by a student on the first day of class.

## Resources

Existing library and graduate student support resources are adequate for this seminar. Additional resources available through the Center for the Integration of Research, Teaching and Learning (CIRTL) Network will augment the students' experience.

## Course Objectives/Outcomes

At the conclusion of the course participants will:

1. Describe the outcomes of a Teaching-as-Research (TAR) project for the TAR participant.
2. Define and describe Teaching-as-Research, compare and contrast TAR with scientific teaching, and the scholarship of teaching and learning.
3. Outline the steps of a TAR project.
4. Develop and/or comment on a rubric for TAR assessment.
5. Evaluate and analyze a completed TAR project in their discipline.

## Is this course considered University Core?

No

## Course Content Outline

- **Week 1**: Teaching-as-Research Part I: Steps of Research
- **Week 2**: Learning-through-Diversity: Definitions and Praxis for Teaching
- **Week 3**: Cooperative/Active Learning and Peer Instruction
- **Week 4**: Inquiry-Based Labs
- **Week 5**: Problem-Based Learning
- **Week 6**: The Flipped Classroom
Assignments / Projects

The class will include weekly online discussions, in class face-to-face discussions, and writing assignments. In addition, the following projects will be incorporated:

Weeks 1&2: Literature Review/TAR research question formation
Week 3: Create a class activity + Peer Review/ Learning Assistants Simulation
Week 4: Develop an Inquiry-Based Lab + Peer Review
Week 5: Explore Case Studies/Revise one for Classroom Use
Week 6: Combine Activities to Create a Flipped Structure for One Course Unit
Week 7: TAR Project Design Session
Week 8 -11: Develop Teaching-As-Research Project + Peer Review
Weeks 12-15: Project Poster Presentations/Gallery Walks

Rubric and Grading Scale

This is a Satisfactory/Unsatisfactory course; however, students will be given feedback on their performance in the following areas:

- Attendance and Participation: 30%
- In-class activities (lesson plans/peer review/lit review): 20%
- TAR project plan: 10%
- TAR project poster: 30%
- TAR project presentation: 10%

Supplemental Information For Addition Of Distance Education Course

Justification for DE Delivery
POLICY STATEMENTS

**Attendance:** Although attendance is not required, students are expected to attend all classes, and will be held responsible for any content covered in the event of an absence.

**Excused Absences:** Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student's immediate family, the death of a member of the student's immediate family, trips for student organizations sponsored by an academic unit, trips for university classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request, and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please consult the Student Policy eHandbook for more information on excused absences.

**Make-Up Policy:** Arrangement to make up a missed major examination (e.g.: hour exams, mid-term exams) due to properly authorized excused absences must be initiated by the student within one week of the end of the period of the excused absence(s). Except in unusual circumstances, such as the continued absence of the student or the advent of university holidays, a make-up exam will take place within two weeks of the date that the student initiates arrangements for it. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins.

**Academic Honesty Policy:** All portions of the Auburn University student academic honesty code (Title XII) found in the Student Policy eHandbook will apply to university courses. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

**Disability Accommodations:** Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).