CTSE 8950 Syllabus – Fall 2015 Designated Thursdays, 5:00 P.M. – 7:00 P.M.

1. Course Number: CTSE 8950

2. Course Title: STEM Education Seminar – Responding to National Standards Credit Hours: Hours may vary from 1-3; Prerequisites: None; Corequisites: None

3. Date Syllabus Prepared: August 2015 by Marilyn Strutchens

4. Texts or Major Resources: Readings as assigned.

- **5.** Course Description: The TEAM-Math mathematics/mathematics education seminar provides an opportunity for graduate students and faculty in mathematics and mathematics education to discuss research and issues related to the TEAM-Math project. Additional topics in STEM Education may be included depending on interest.
- **6.** Course Objectives: This seminar has two major objectives:
 - We will review various documents and initiatives related to the Common Core State Standards for Mathematics and/or the Next Generation Science Standards and other college and Career Ready Standards.
 - We will discuss on-going research related to STEM education presented by seminar participants.

Course Content and Tentative Schedule:

Date	Presentations
August 20, 2015	STEM Leadership Conference sponsored by Project Kalidescope (Octavia Tripp)
	• Overview of the Seminar and Planning (Marilyn Strutchens)
	What are major issues we should explore as a community? (Strutchens)
September 10, 2015	Proofs Without Words (Tin-Yau Tam)
	Twitter Camp and Supporting the Development of Teachers' Characteristics
	Needed for the Selection and Implementation of Cognitively Demanding
	Tasks through Engagement with the MathTwitterBlogosphere (Christopher Parrish)
September 24, 2015	MTEP
	Active Learning (Ulrich Albrecht and Lauretta Garrett)
	• STRIDES and Measures (W. Gary Martin)
	• Clinical Experiences (Marilyn Strutchens)
October 1, 2015	Spatial Sense (Judy Welch)
	• TBA (Angela Love)
October 22 -23, 2015	Alabama Council of Teachers of Mathematics in Birmingham, AL (Optional
November 5, 2015	Update on STEM Leadership Conference sponsored by Project Kalidescope (October Tring)
	(Octavia Tripp)
	 Principles to Actions Modules for Professional Development (W. Gary Martin & Marilyn Strutchens
	• Formative Assessment Initiative (Marilyn Strutchens & Megan Burton)
November 19, 2015	Illustrative Mathematics Virtual Lecture Series: "A Mathematics Classroom for All Students." Marilyn Strutchens: Fostering Mathematical Reasoning and Sense Making
	for All Students Via Multiple Entry Level Tasks
	Webinar 6:00 Central Time (Optional)
	Professional Mathematics Learning Communities Project Update (Marilyn
December 3, 2015	Strutchens, Beth Hickman, W. Gary Martin, Pamela Norris, Ulrich Albrecht,
	Huajun Huang, Megan Burton, Norendra Govil, & Lisa Ross)
	TBA (Lauretta Garrett)
	• Report on NCTM Nashville Regional (Ali Grace Eiland, Ruby Ellis, and
	Christopher Parrish

7. Course Requirements/Evaluation: Students enrolled in CTSE 8950 (1 CR), should:

- Attend a minimum of six sessions.
- Co-lead at least one session.
- Prepare a final five-page paper summarizing what they have learned in the seminar. Students enrolled for more than 1 hour should negotiate additional requirements with Dr. Strutchens.

8. Class Policy Statements:

- <u>Participation:</u> Students are expected to participate in all class discussions and participate in all exercises. It is
 the student's responsibility to contact the instructor if assignment deadlines are not met. Students are
 responsible for initiating arrangements for missed work.
- Attendance. Each student is expected to attend all sessions as negotiated.
- Unannounced Quizzes: There will be no unannounced quizzes.
- 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).
- Honesty Code: The Student Academic Honesty Code (see Student Policy eHandbook) will be strictly enforced.

Students are encouraged to provide feedback on their experiences in the course using AU eValuate.