**CTSE 8950 Syllabus – Spring 2015**

1. **Course Number:** CTSE 8950
2. **Course Title:** STEM Education Seminar
**Credit Hours:** Hours may vary from 1-3; **Prerequisites:** None; **Corequisites:** None
3. **Date Syllabus Prepared:**  January 21, 2015 by W. Gary Martin
4. **Texts or Major Resources:** Readings as assigned.
5. **Course Description:** The STEM education seminar provides an opportunity for graduate students and faculty in STEM fields, and others who are interested, to discuss research and current issues in math, science, and technology education.
6. **Course Objectives:** This seminar has three major objectives:
* We will review various documents and national initiatives related to STEM education, including the Common Core State Standards for Mathematics and/or the Next Generation Science Standards.
* We will discuss progress of various STEM education projects and initiatives at Auburn University.
* We will discuss other on-going research related to STEM education presented by seminar participants.
1. **Course Content and *Tentative* Schedule:** *(updated February 2, 2015)*

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| **Date** | **Topics**  | **Presenters** |
| January 214:30-6:30 PM  | * Principles to Actions Professional Dev. Working Group
* Updates and Planning
 | Martin, Strutchens, RossMartin |
| February 44:30-6:30 PM  | * STEM Education in the Academy (Panel discussion)
* MTE-Partnership – Ensuring Candidate Quality
 | Albrecht, Russell, StrutchensMartin & McCall |
| February 184:30-6:30 PM  | * Vocabulary in Middle Grades Science
* Ecology
 | CroweColvin |
| February 265:30-6:30 PM | BONUS SESSION* Standards-based Teacher Preparation
 | Roger Howe, Yale University |
| March 114:30-6:30 PM | * Retention in the STEM Pipeline
* Alabama Science Standards
 | Garrett |
| March 184:30-6:30 PM  | * Mathematics Education and Culture around the World: China, Germany and India
 | Govil & StuckwischHuang |
| April 14:30-6:30 PM  | * MCOP2
* Mathematical Tasks
 | GleasonParrish |
| April 224:30-6:30 PM  | * Visualization and STEAM
* Coding in K-12
* International Congress of Mathematics Education
 | WelchMarghituStrutchens |
| April 294:30-6:30 PM  | * Mathematical Teaching Practices: Research Action
* Wrap-up session for the semester
 | Ellis, Horn, McCall, Parrish |

1. **Course Requirements/Evaluation:**

Students enrolled in CTSE 7970 (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. Martin.

1. **Class Policy Statements:**
* Participation: 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.**