**CTSE 7530 Syllabus, Spring 2023**

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| **Instructor Information**  Dr. W. Gary Martin  Haley 5008  martiwg@auburn.edu; (334) 559-3141 | **Class Meetings**  Tuesday, 5:00-8:00  TBD |

1. **Course Number:** CTSE 7530

**Course Title:** Organization of Program-Mathematics Education

**Credit Hours:** 3 semester hours

**Prerequisites:** None; **Corequisites:** None

1. **Date Syllabus Revised:** May 2017
2. **Texts or Major Resources:**

Jones, P. S. (Ed.) (1970). *A history of mathematics education in the United States and Canada*, Thirty-second Yearbook. National Council of Teachers of Mathematics.

Common Core State Standards Initiative. (2010). *Common core state standards for mathematics*. Author. <http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf>

National Council of Teachers of Mathematics. (2014). *Principles to actions: Ensuring mathematical success for all.* Author.

Stanic, G.M.A., & Kilpatrick, J. (Eds.) (2003). *A history of school mathematics, Volumes 1 and 2.* National Council of Teacher of Mathematics. <https://www.nctm.org/Store/Products/A-History-of-School-Mathematics-(Two-Volume-Set)/>

In addition, journal articles, books chapters, books, and monographs that focus on issues related to changes in mathematics education curricula and education in general.

1. **Course Description:** An overview of forces shaping critical issues shaping mathematics education, including perspectives from the history of school mathematics, learning theory, and curriculum.
2. **Course Objectives:** To prepare mathematics educators who:
3. Understand how historical issues and theoretical perspectives impact the current context of mathematics education
4. Are aware of national and state standards and other policies related to curriculum and their impact on mathematics education practice
5. Understand how to assess the efficacy of textbooks and other curriculum materials in meeting programmatic goals
6. Can create curriculum guides and other curriculum documents to guide instruction
7. **Tentative Course Content and Schedule**  -- See Google Drive for updated information.

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| **Dates** | **Comments** | **Assignments** |
| Jan. 17 |  |  |
| Jan. 25 |  |  |
| Jan. 31 | No class; AMTE Conference |  |
| Feb. 7 |  | Paper #1 due |
| Feb. 14 |  |  |
| Feb. 21 |  |  |
| Feb. 25 |  | Paper #2 due |
| Mar. 7 | Spring break |  |
| Mar. 14 |  |  |
| Mar. 21 |  |  |
| Mar. 28 |  | Paper #3 due |
| Apr. 4 |  |  |
| Apr. 11 |  |  |
| Apr. 18 |  | Class project |
| Apr. 25 |  | Individual project |
|  | Final exam |  |

1. **Course Requirements/Evaluation:**

CTSE 7530 is intended to have a discussion-oriented, seminar environment. Thus, each participant will contribute actively to discussions based on readings and other assignments. Grades will be based on level and quality of class and written work, as well as written assignments. **All assignments must be typewritten and double-spaced, using size 12-font. APA style should be used for papers and references.**  Deductions will be made from assignments for grammatical mistakes, typos, and spelling errors.

**Assignments**

* Participation in class discussions, including completing all assigned readings, short papers, and other assignments (30% of grade)
* Presentations to class, including major presentations and additional smaller presentations (25% of grade)
* Individual project (30% of grade)
* Class project (15% of grade)

**Grading**

All assignments will be graded on a 4-point scale (5=A; 4=B; 3=C; 2=D; 1=F) and weighted averages will be computed following the percentages given in the preceding section. Final grades will be assigned by rounding to the nearest whole number; i.e., 4.5 and up is an A, 3.5 and up is a B, and so forth.

**Descriptions of Major Assignments**

### Daily Work, Short Essays, and Other Assignments

Students will participate in an on-line discussion following each class. (10% total)

Students will be asked to prepare 2-3 three-page papers in response to assigned prompts. These papers should follow the guidelines above regarding style and presentation. Other readings and assignments should be completed as assigned. (20% total)

### Class Presentations

During the semester students will be asked to lead at least two major discussions, as well various shorter presentations. Presenters must provide the instructor with a copy of their presentation and other handouts. They will be responsible for handouts and any other materials needed to lead the discussion.

Historical. Presenters will summarize forces shaping mathematics education during their assigned era, based on class research. (about 30 minutes in length)

1. What was the social context for this era, including major historical events and forces outside of education?
2. What were the major goals and priorities for mathematics education? Why?
3. Who were some of the key players who influenced that era?
4. What were some of the seminal events in mathematics education?

Theory Related to Learning Mathematics. Presenters will research one or more scholars who have influence the field’s perspectives on mathematics education, including reading at least one paper authored by each scholar. The presentation could include a summary of their findings and reactions, as well as an activity that exemplifies each of learning theory. (about 45 minutes in length)

Historical Document. Presenters will provide an overview of the document, including its purpose and major features. (about 20 minutes in length)

Individual Project. The individual project should include one or both of the following components, based on the interests of the student. Both the topics and the comparative weights of the two components must be negotiated in advance with the instructor. These are formal papers that should follow proper APA style and include an extensive reference list.

a) Issue Brief. The student will prepare a 5-20 page paper addressing a contemporary issue in mathematics curriculum, as well as make a presentation to the class. The student should address the following areas:

1. Define the issue in mathematics education
2. Describe advantages and disadvantages of two or more suggested responses (or approaches); i.e., summarize major arguments, and
3. State and defend your personal view.

b) Curriculum Analysis. The student will prepare a 5-20 page paper addressing a content area in mathematics education that crosses some band of grades, as well as make a presentation to the class. Students should refer to recommendations given in various frameworks, journal articles discussing the teaching and learning of that topic, and implementation in various textbook series. Students should address the following questions, including both varying perspectives and their personal synthesis:

* 1. What are the goals for student learning in this content area?
  2. What different approaches are taken to presenting the content?
  3. How should the content grow across the grades?
  4. What are some key tasks at different levels that will promote student learning?

Class project. We will work together on a class project. Individuals will be graded on their contributions to the group effort. Additional details will be provided.

1. **Class Policy Statements:**

* **Attendance.** Each student is expected to attend all classes as scheduled (whether on-line or virtual) and participate in all class discussions and activities. Unavoidable absences must be documented and cleared with the instructor in advance if possible. The second non-approved absence from class and each succeeding unapproved absence from class will result in a lowering of the student's final grade by one letter grade.

Students are also expected to attend all scheduled field experiences. An unexcused absence may also lead to action as a violation of the Standards of Professional Conduct, as outlined below, with resulting actions impacting their continuation in the program.

* **Late Assignments.** Any assignment that is submitted after the announced due date will have one letter grade deducted from it per day late. Students should reach out to their instructor immediately to discuss any concerns. 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.
* **Make-up Policy.** Students who miss scheduled will need to contact the instructor and turn in the valid excuse within 48 hours from the time that the exams were given. The makeup exam schedule is determined by the instructor and will need to be done within ONE week (5 work days) from the time that the exams were given. Students who miss the makeup without valid excuses will get zero on the exam. Valid excuses include: 1) illness documented by a physician, 2) evidence of personal or family emergency, and  3) official university excuses.

The format, questions and difficulty-level of make-up exams are not guaranteed to be the same as the normal exam, which are at the discretion of the instructors. Students are not allowed to choose the make-up dates or formats on their own.

* **Unannounced Quizzes.** The instructor may give unannounced quizzes as deemed necessary, to be included as a part of the exam score.
* **Faculty Communication and Feedback.** Any communications should be directed to the instructor’s Auburn email address. Responses will be provided within 24 hours whenever possible. If students have concerns about communication or feedback, they should always contact their instructor first. Students should explain their concerns as clearly as possible without judgment or emotion. Effective communication is an important skill, and every interaction in their program is an opportunity to develop this skill.

***Your Auburn University email address is the university-approved form of communication between instructors and students.*** Please ensure that your notifications are set correctly to ensure timely delivery. Additionally, it is your responsibility to read course announcements sent by your instructor. These are posted in Canvas, and you can configure your notification preferences to receive an email each time a new announcement is posted.

* **Diversity Statement.** All people have the right to be addressed and referred to in accordance with their personal identity. Many people might go by a name in daily life that is different from their legal name. In this classroom, we will refer to people by the names that they go by. Pronouns are a way to affirm someone's identity. They are simply a public way in which people are referred to in place of their name (e.g. "he" or "she" or "they" or "ze" or something else). In this classroom, you are invited to share what pronouns you go by, and we will refer to people using the names and pronouns that they share.
* **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 immediately needed. If you need accommodations but have not established them, make an appointment with the Office of Accessibility, 1228 Haley Center, 334-844-2096.
* **Academic Integrity.** Auburn University has adopted an Honor System proposed by its students and faculty to promote academic integrity and has enacted the following code:

*“We, the faculty, instructors, and students of the (University course here) pledge to fulfill our mutual responsibilities to each other and the academic community at large with honor and integrity in order to build and maintain a climate of respect and trust that will enhance our research, teaching, and learning. We will support the Honor System of the School, and will not tolerate activities that undermine academic integrity.”*

Academic dishonesty is an offense that will be reported to the Academic Honesty Committee. Please refer to the following document for further information regarding academic honesty: [Auburn University Student Academic Honesty Code](https://sites.auburn.edu/admin/universitypolicies/policies/academichonestycode.pdf)

* **Standards of Professional Conduct.** As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below:
  + - Engage in responsible and ethical professional practices
    - Contribute to collaborative learning communities
    - Demonstrate a commitment to diversity
    - Model and nurture intellectual vitality

Students will be asked to sign a contract affirming Standards of Professional Conduct for the secondary mathematics program. Failure to comply with those standards may lead to actions including dismissal from the lab experience, the course, and/or the Secondary Mathematics Education Program.

* **Face Coverings.** The university permits individual faculty members to require face coverings in their classrooms and instructional laboratories. All students enrolled in this course are required to properly wear a face covering that covers the nose and mouth while inside the classroom, laboratory, studio, or office. Failure to comply with this requirement represents a potential Code of Student Conduct violation and may be reported as a non-academic violation. Please consult the [Classroom Behavior Policy](https://sites.auburn.edu/admin/universitypolicies/Policies/PolicyonClassroomBehavior.pdf) for additional details.
* **Students are encouraged to provide feedback on their experiences in the course using AU eValuate.**