TEXAS A&M UNIVERSITY-CORPUS CHRISTI
Methods of Teaching Mathematics

Course/Sec: EDCI 5335.001
Instructor: Dr. Faye Bruun
Dates: Summer I 2016
Office: ECDC 219J
Office Phone: 361-825-2417
Office Hours: Virtual
E-Mail: Through BlackBoard messages And by appointment

I. Course Description
A course designed to emphasize methods of teaching the essential elements in mathematics for Grades 1-5. An emphasis will be placed on the use of concrete manipulatives so that learning is accomplished with understanding.

II. Rationale
Persons pursuing a graduate degree in education will benefit from learning how incorporating research-based instructional practices into their classroom will help their students become active, engaged learners and increase student achievement.

This course is designed for graduate students who want to enhance and expand their understanding of current methods in math education. The course is offered in conjunction with the 12th annual ME by the SEa Conference.

III. State Adopted Proficiencies for Teachers

Learner-Centered Knowledge: The teacher possesses and draws on a rich knowledge base of content, pedagogy, and technology to provide relevant and meaningful learning experiences for all students.

Learner-Centered Instruction: To create a learner-centered community, the teacher collaboratively identifies needs; and plans, implements and assesses instruction using technology and other resources.

Equity in Excellence for all Learners: The teacher responds appropriately to diverse groups of learners.

Learner-Centered Communication: While acting as an advocate for all students and the school, the teacher demonstrates effective professional and interpersonal communication skills.

Learner-Centered Professional Development: The teacher, as a reflective practitioner dedicated to all students’ success, demonstrates a commitment to learn, to improve the profession, and to maintain professional ethics and personal integrity.
IV. TExES Competencies

This course is designed for teachers who are already certified. TExES competencies, although expanded upon within this course, are not identified since the participating teachers will have already completed their examinations.

V. Course Objectives and Outcomes

This course will be organized around trend and issues in math education, as well as, research-based instructional approaches and strategies for increasing student achievement, specifically in mathematics.

- The student will attend ME by the SEa and evaluate four sessions.
- The student will read peer-reviewed, scholarly articles on current trends and issues in math education.
- The student will participate in online class discussions concerning current math trends.
- The student will present a chapter from the Van de Valle textbook.
- The student will develop and present a lesson plan that would be effective for a math concept and grade level.
- The student will write a reflection paper based on their in-class lesson implementation and feedback from peers.

VI. Course Topics

Course topics include, but are not limited to:

- Current topics in Mathematics education
- Research-based Instructional Strategies for Mathematics
- Research gathered from various educational journals concerning topics being taught at their chosen grade level for the purposes of a) evaluating the research and b) incorporating the better ideas from the research into their planning/teaching.
- Becoming proficient in the use of various manipulatives in the teaching of mathematics

VII. Instructional Methods and Activities

Traditional experiences (reading assignments, journal article reviews, written assignments, on line discussion)

BlackBoard assignments and interaction, conference attendance
VIII. Evaluation and Grade Assignment

The methods of evaluation and the criteria for grade assignment are:

A. Methods and Percentage of Final Course Grade Each Assessment

1. Conference Attendance: Students must attend the 12th Annual ME by the SEa Conference, June 17, 2016. Conference reaction papers (25%): Students must complete four written reaction papers reflecting their engagement with and evaluation of one keynote address and three regular conference sessions.

2. Discussion Board (25%)

You will be a part of the learning community by responding to a question on the discussion board. The promptness and initiative of participating in threaded discussions done in a timely fashion will demonstrate self-motivation. The delivery of your posts will address your attention to detail in terms of being grammatically correct with rare misspellings. You will make posts that are relevant to the original discussion by staying on topic. By contributing to the Learning Community (LC), you will demonstrate an effort to further the development of a collaborative learning experience. You will write a one-paragraph reflection that addresses a given prompt. Then you will review two other students' postings and post one response/comment to each student's post (Total of two replies). You can feel free to provide/post responses to more than two classmates' postings to enhance a discussion; however, you will only receive credit for replying to two classmates' posts. Remember to be courteous and respectful to all peers and in your responses to postings. Professionalism is expected at ALL times.

3. Chapter presentation from Van de Valle textbook (25%)

4. Instructional Strategies Self-Study (25%)

Students will select a specific grade and math content for study. Students will analyze their current classroom practices as they relate to the research-based instructional approaches discussed in the course. They will develop a plan that would implement changes that would be appropriate, responsible, and effective for their math concept. Requirements must be completed by the end of Summer Session I. Students will share their final reports and teach their newly developed lesson in person at a meeting on campus June 28, 2016.

Grading: EDCI 5335

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<tr>
<th>Assessment</th>
<th>Percentage</th>
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<tr>
<td>Discussion board</td>
<td>25</td>
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<td>Conference reaction reports</td>
<td>25</td>
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<td>Chapter presentation</td>
<td>25</td>
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<tr>
<td>Instructional Strategies Self-Study</td>
<td>25</td>
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<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
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B. Grading Scale

Grades:

- 92-100% = A
- 83-91% = B
- 74-82% = C
- 65-73% = D
- below 64% = F

IX. Course Schedule and Policies

A. A tentative course schedule:
   - Monday, June 6, 12:00-1:55 ECMS, Welcome/Intro. to Course
     (1st face-to-face class meeting)
   - Discussion Board, June 6 - June 25
   - Friday, June 17, ME by the SEa, 8:30am – 4:00pm, Center for Instruction
   - Discussion Board, June 6 - June 25
   - Chapter presentations, June 20 & 22
   - Tuesday, June 28, 10:00am – 3:00pm, ECMS, Present Instructional Strategies
     Self Study (Course Symposium)

B. Class Policies

   Late assignments
   Late assignments will not receive full credit. A deduction of 10% per day will be
   applied to any late assignment. Communicating an excuse for a late assignment
   does not constitute a waiver of the deadline or avoid the deduction.

   Attendance/tardiness
   Attendance will be recorded for this class. Points will be deducted for class
   absences. Notification of an absence does not constitute a class waiver.

   Late work and Make-up Exams
   Full credit will not be given for late assignments or unexcused missed conference.
   Because this is a conference-related course, there can be no extensions for the
   final presentation or the final written report.

   Extra Credit
   Extra credit is not an option for this course.

X. Textbook(s) Recommended

Elementary and Middle School Mathematics: Teaching Developmentally,
Enhanced Pearson eText with Loose-Leaf Version -- Access Card
Package, 9/e Van de Walle, Karp & Bay-Williams, or previous editions on
loan from professor
XI. Bibliography

*The knowledge bases that support course content and procedures include:*


Additional Policies

*Cell Phone/Electronic Device Usage*

Cell phones and other electronic devices should not be used during class. If a potential emergency exists where a student is expecting an important call concerning a child or family member, the phone should be put on vibrate.
Academic Integrity/Plagiarism.

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a level of discipline appropriate to the misconduct. This may include a requirement to re-do work in question; requirement to submit additional work; lowering of grade on work in question; assigning grade of ‘F’ to work in question; assigning grade of ‘F’ for course; recommendation for more severe punishment, such as suspension or dismissal from the University. The procedure for Academic Misconduct cases is posted on BlackBoard.

Learning and teaching take place in an atmosphere of intellectual freedom and openness. All members of the academic community are responsible for supporting freedom and openness through rigorous personal standards of honesty and fairness. Plagiarism and other forms of academic dishonesty undermine the very purpose of the university and diminish the value of an education.

Plagiarism is wholly unacceptable and, for the purposes of this course, is defined as using in part or in whole any material written or designed by someone other than the student, unless specific credit is given to the person or resource material used. This includes, but is not limited to: lesson plans found on the Internet and/or provided by classroom teachers, or found in any form of publication (e.g., books, magazines, Internet sites), book descriptions/reviews, course work done by previous students (or any other current or TAMU-CC student). Appropriate citation of resources is required.

Dropping a Class

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class.

Preferred methods of scholarly citations

XII. Grade Appeals*
As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

XIII. Disabilities Accommodations*
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816.
If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

XIV. Statement of Academic Continuity*
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.