

EDCI 530 – Mathematics Curriculum COURSE SYLLABUS: Summer 2 2024

INSTRUCTOR INFORMATION

Instructor: Dr. Amy Corp, (EdD Curriculum & Instruction- Math Ed cognate) Office Location: Virtual Office Office Hours: By Appointment Office Phone: 903-875-7617 Cell # given in D2L. Office Fax: N/A University Email Address: <u>amy.corp@tamuc.edu</u> Preferred Form of Communication: email Communication Response Time: 24hrs on weekday

COURSE INFORMATION

2016

Materials – Textbooks, Readings, Supplementary Readings:

TWO Required Texts/Materials: (I promise it is worth it to buy both books.)

- MAKING SENSE OF MATH. FOR TEACHING K-2
 - Author DIXON
 - Edition
 - ISBN 9781942496397

OR

- MAKING SENSE OF MATH. FOR TEACHING 3rd-5th
 - Author DIXON
 - **Edition** 2016
 - ISBN 9781942496427
- MAKING SENSE OF MATH FOR TEACHING GRADES 6-8
 - Author Nolan
 - **Edition** 2016
 - ISBN 9781942496458
- AND

1. Choose which one fits your teaching. Email if you are teaching above 8th, we have another text option for high school.

The syllabus/schedule are subject to change.

• 2. Boaler, Jo Mathematical Mindsets: Unleashing Students' Potential through Creative Mathematics, Inspiring Messages and Innovative Teaching (Mindset Mathematics) 2nd Edition

MATHEMATICAL

ISBN-13: 978-1119823063

- ISBN-10: 1119823064
- Texas Essential Knowledge and Skills (TEKS) Mathematics K-8 available on the course website and TEA- there is an APP OR Pre-k guidelines OR
- NAEYC standards for young children.
- Handouts/Articles on the course website

Course Description

EDCI 530 identifies novel research-based recommendations toward modernization of both content and methods of elementary mathematics teaching and learning and relates these innovations to good teaching practices already in use. The course includes the language of number sets, number systems, the means for improving student performance through problem-solving, and the development of growth mindsets.

Student Learning Outcomes

Through online demonstrations, video clips, and presentations as well as out-of-class readings and written work, ELED 530 students will have the opportunity to:

- Examine their beliefs about the goals and content of elementary and middle school mathematics to current reform and record responses to questions in video chat.
- Understand what a growth mindset is and explore what it takes to foster this in your teaching of mathematics by answering questions from the chapters.
- Develop their ability to create an environment for the learning and teaching of mathematics that promotes problem-solving with understanding and sense-making with cognitive tasks and routines.
- Develop their ability to understand concepts in particular mathematics topic areas at the grade level they teach by completing Do Now problems (Dixon workbook).

COURSE REQUIREMENTS

Minimal Technical Skills Needed

The following technology is required for success in this course.

- Internet access/connection high speed recommended
- Word Processor (Word, Google Docs, Adobe) save all files as doc, or pdf. files

Instructional Methods

Assignment schedule, details, and due dates will be posted in the course website. It is your responsibility to make sure that all assignments are submitted correctly and on time, according to the assignment instructions.

1. Online Discussions - (15pts for each)

Video discussion by groups for chapters in Boaler's text (each student will be prepared to answer a question & respond intelligently to every question) These should be about 5-10 minutes.

 Weekly Chapter work from Dixon text & short Reflection – (25pts for each: 18 for work, 7 for reflection)

Since we do not meet face to face to discuss our reflections of learning...after class each week, you will be required to reflect upon what you learned from the weekly readings, assignments, class discussions, and activities. (options available)

3. Learning Tasks:

Research: Determine a math routine or teaching strategy for equity (60pts) Learn about and prepare a routine for equity/access (60pts)

Learn about several 6+ math routines, choose an option that will suite your students and create a plan for implementing including a reflection of how and why you will use these routines (template included).

High Cognitive Demand Task Design and Impementation (60pts) High Cognitive Demand Tasks: (20)

Choose a concept that you plan to teach to your students. Develop **a** high cognitive demand task that will engage your students in mathematical thinking about this concept. Provide a 3-4 sentence rationale justifying why the task qualifies as high cognitive demand. Be sure to reference theory in your justification.

Assessment Development: (20)

Develop both a formative and summative assessment that you would use to assess student learning on the tasks you created. Be sure to include any tools you would use to assess student learning.

Implementation and Teacher Case: (20)

With 'a student' or class, implement your high cognitive demand tasks. You should reflect about the experience and then write a case story that paints a picture of the episodes and your thoughts and comments about <u>students thinking and growth mindset</u> and your implementation of the task. (Directions are on the tab.) ***Summer** classes can be implemented with anyone willing to do the task, hopefully a child.

4. Final Exam (60pts)

This exam will include content knowledge, pedagogical content knowledge and pedagogical knowledge over the entire semester. The content comes from key points in the Bolar text.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100% B = 80%-89% C = 70%-79% D = 60%-69% F = 59% or Below

Assessments

See instructional methods section.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements: https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support: <u>https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_suppo</u> <u>rt.htm</u>

Zoom Video Conferencing Tool <u>https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu</u>

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <u>helpdesk@tamuc.edu</u>.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

The syllabus/schedule are subject to change.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student Guidebook</u>. <u>http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as</u> <u>px</u>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>. http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03 Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDis honestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

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 have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> <u>http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ</u> <u>ices/</u>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Department or Accrediting Agency Required Content

COURSE OUTLINE / CALENDAR

This is sent the week before class opens.

*schedule may change * Follow the schedule in D2L for weekly assignments and topics (often differentiated by teaching level).