

MTE 554.001 Teaching & Learning Algebra COURSE SYLLABUS: Summer 2022

Instructor: Rebecca Dibbs, PhD Office Location: 318 Binnion Office Hours: M-F 1-2 pm on ZOOM University Email Address: rebecca.dibbs@tamuc.edu

COURSE INFORMATION

Materials

Textbook(s) Required: The Mathematics that Every Secondary Teacher Needs to Know (2nd Ed.) Sultan & Artzt.

Course Description: The purpose of this course is to introduce you to the breadth of research done in the field of mathematics education, through the lens of algebra and algebraic reasoning.

Student Learning Outcomes

- To expose you to the norms and practices of the field of research in mathematics education
- To help you reflect on your own teaching from a research perspective
- To engage in scholastic inquiry on a mathematical concept relevant to your own interests

COURSE REQUIREMENTS

Course Activities

Pencast: The lectures will be recorded for you on Pencasts. It is recommended that you watch all of the pencasts before starting the homework

- Homework: Will be problems from the textbook. See the end of the syllabus for assignments. See D2L for due dates
- Midterm: Will cover all topics from Chapter 3 of the textbook. It will be take home. See D2L for Due Dates

Final: Will cover chapters 8 & 10. It will be take home. See D2L for due dates

Issues in Algebra: You will have a weekly reading about current issues in teaching and learning algebra. You will be writing a summary and reaction paper about each of the reading. Your paper should (1) Summarize the reading in 2-3 paragraphs (2) Discuss how the reading relates to the teaching and learning of algebra in 1-2 paragraphs (3) What could be done in your future or current classroom to address the issue in algebra in 1-2 paragraphs

GRADING

The standard grading scale will be used. All grades will be rounded up to the nearest whole point before letter grades are assigned. Thus, 89.1 rounds to 90 and is an A, but 78.9 rounds to 79 and is a C.

25%	Homework
25%	Midterm (Chapter 3)
25%	Final (Chapter 8 & 10)
25%	Issues in Algebra Response Papers

TECHNOLOGY REQUIREMENTS

You will need reliable internet access for this course. A graphing calculator, excel, or wolfram alpha may also come in handy from time to time.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

My primary form of communication with the class will be through Email and Announcements. Any changes to the syllabus or other important information critical to the class will be disseminated to students in this way via your official University Email address available to me through and in this email. It will be your responsibility to check your University Email and regularly.

Students who Email me outside of regular office hours can expect a reply within 24 hours M-F. Students who Email me during holidays or over the weekend should expect a reply by the end of the next regularly scheduled business day.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email <u>helpdesk@tamuc.edu</u> or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at <u>https://leo.tamuc.edu</u>.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In **ALL** instances, incidents of academic dishonesty will be reported to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test of assignment
- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- · Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment
- If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

University Specific Procedures

ADA Statement

Students with Disabilities

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 Gee Library- Room 132 Phone (903) 886-5150 or (903) 886-5835

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

COURSE OUTLINE / CALENDAR

Suggested Schedule. Note: With the exception of Week 5, all assignments are due 11:59 pm Sunday of the following week. On Week 5, all assignments are due 11:59 pm on Thursday.

Watch 3.2 & 3.3 Pencast & take	Watch 3.4 & 3.5 Pencast & Take	Watch 3.6 Pencast, take	Finish Homework 1	Do reading & write response
notes	Notes	notes & start homework 1		(Brazillian Street Kids)
Watch 3.7 & 3.8 Pencast & take notes. Start Midterm	Watch 8.2 & 8.3 Pencast & take notes, and continue midterm	Watch 8.4 Pencast, take notes, start HW 2, and continue on Midterm	Finish Homework 2 and Midterm	Do reading & write response (Algebra & Gender)
Watch 8.5 & 8.6 Pencast, & take notes	Watch 8.7 & 8.8 Pencast, & take notes	Watch 8.9 Pencast, take notes, and start HW 3	Finish Homework 3	Do reading & write response (Algebra & Race)
Watch 8.10 & 8.11 Pencast & take notes	Watch 8.12 & 8.13 Pencast & take notes	Watch 8.14 Pencasts, take notes and start HW 4	Finish Homework 4	Do reading & write response (Algebra & Students with Disabilities)
Watch 8.15 & 8.16, take notes and start Final	Watch 10.2 & 10.3 Pencast, take notes, and work on final	Watch 10.4 Pencast, take notes, start HW 5 and work on the final	Do reading & write response (Algebra for All?), finish Homework 5 and the final	