



MTH 377 Math for Elementary Teachers II

Lezlie McElwee

UNITED TRIBES TECHNICAL COLLEGE

COURSE INFORMATION

This course utilizes a problem-solving approach with topics significant to grades 1-8 standards-based education. This course includes: properties of geometric shapes, measurement, triangle congruence and similarity, geometric constructions, Cartesian coordinates, symmetry, and selected topics from probability and statistics.

Credits: 3

Pre/Corequisites:

- Prerequisite: MTH 277

CLASS INFORMATION

Section Number: A

Term: Spring Year: 2022 Start Date: 1/10/2022 End Date: 5/6/2022

Meeting Times: Tuesday and Thursday 1:00 - 2:20 PM

Meeting Location: Main Education Building Room 104

Delivery Mode: Face to Face

INSTRUCTOR

Lezlie McElwee

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Office Location: Main Education Building 122

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 – 9:00		Curriculum Committee Meeting			
9:00 – 9:50	Office Hours	ENG 238 Children's Literature Room 104	Office Hours	ENG 238 Children's Literature Room 104	Office Hours
10:00 – 10:30	PSY 230 Educational Psychology Room 104		PSY 230 Educational Psychology Room 104		PSY 230 Educational Psychology Room 104
10:30 – 10:50					
11:00 – 11:30		Office Hours	Office Hours	Office Hours	
11:30 – 11:50					
12:00 – 1:00	Office Hours				Office Hours
1:00 – 1:50	EDU 205 Exceptional Education Room 104	MTH 377 Mathematics for Elementary Teachers II Room 104	EDU 205 Exceptional Education Room 104	MTH 377 Mathematics for Elementary Teachers II Room 104	EDU 205 Exceptional Education Room 104
2:00 – 2:30	HPR 297 HPR Internship Room 122				
2:30 – 2:50			Office Hours		Office Hours

TEXTBOOKS

Bassarear, T., & Moss, M., (2019). *Mathematics for Elementary School Teachers* (7th Edition). Boston, MA: Cengage

INSTITUTIONAL LEARNER OUTCOMES

Quantitative & Scientific Reasoning: Develop solutions to mathematical and scientific problems.

COURSE OBJECTIVES

1. Use mathematical knowledge to solve problems.
2. Participate in cooperative learning groups.
3. Develop a teacher perspective of math taught to elementary students.
4. Reflect in writing the connections made between the mathematical ideas and their own understanding.
5. Experience teaching a school-age group of children math skills.

GRADING INFORMATION

Relationship between ND ESPB Elementary Education Standards, Outcomes and

Course Assessments

Standards/Program Outcome	Assessment- Portfolio Artifact:
<p>INTASC Standard 4:</p> <p>Content Knowledge- The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.</p>	<ul style="list-style-type: none"> • Real Life Math Activity • Analyze Math Applications • Research and Peer Teach (7th Generation Math Activity) • Boom Learning Deck
<p>PROGRAM OUTCOME 6: Monitor learner progress by using multiple methods of assessment.</p> <p>6.1 Differentiate between formative and summative assessments.</p> <p>6.2 Demonstrate how to design, adapt, or select appropriate assessment.</p> <p>6.3 Analyze assessment data to understand patterns and gaps in learning.</p> <p>6.4 Evaluate and report learner progress against academic content standards.</p> <p>6.5 Explore accommodations and modifications in assessments.</p>	

United Tribes Technical College Teacher Education Conceptual Framework



The Teacher Education unit seeks to improve the quality of education in America by producing reflective professional educators who have demonstrated competency in the knowledge, skills and dispositions necessary for effective teaching through a coherent program of study. Using the INTASC (Interstate New Teacher Assessment and Support Consortium) standards, as well as the philosophy of the department's conceptual framework, Teacher Education has established candidate outcomes that are assessed throughout the Teacher Education program(s) The Teacher Education program is based on shared core beliefs

that incorporate the 4Rs - Relatedness, Relevance, Respect, and Responsibility.

Relatedness is evidenced by believing and behaving as if you are a relative to another person or thing. It is demonstrated and reinforced through collaborations with children and families.

Relevance is meaningful and authentic learning experiences tied directly to state and national standards. Candidates learn and experience reflective practice through hands-on practicums in the classroom under mentor and instructor guidance. They are provided the opportunity to study concepts that are meaningful and relevant to one's life and interests.

Respect is an important traditional Native value. Respect is demonstrated through candidate contributions and their respect of others' contributions. The disposition of respect is demonstrated through courtesy, kindness, and acceptance of individuals and their contributions.

Responsibility is a core value of Native cultures as well as the culture of teaching. Candidates are expected to demonstrate accountability for their actions and decisions as they engage in their general education and teacher education curriculum.

A. GRADING SCALE

Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

B. COMMUNICATION

Email is the official means of communication at UTTC. Information Technology (IT) will assign all students an official UTTC email address. All correspondence from the College to the student will be sent to the student's UTTC email address. Students are expected to check their email regularly and are responsible for all information sent to them via their UTTC email address. Faculty expect students to use their official email address for all instructional purposes, including communicating with the faculty.

C. ATTENDANCE

Students at UTTC are expected to participate in all of their class sessions and are expected to communicate with their instructors regarding any emergencies that cause them to miss class. Regardless of the circumstances, the student is responsible for obtaining any information missed because of the absence and completing any outstanding assignments. The student may refer to the course assignments in My.UTTC.edu, contact another student enrolled in the course, or meet with the course instructor during office hours to get the missing information. Attendance is entered as "Present", "Absent-Unexcused", or "Excused" (college-sanctioned absences).

ZOOM Attendance Policy

UTTC students are expected to attend all of their classes in person. Students can attend a class virtually using Zoom only if the student is sick and unable to attend class or quarantined due to a contagious illness (confirmed by a medical professional) but on a limited basis. If the student is going to use Zoom under these circumstances, the following conditions must apply:

1. The student must have a computer and a reliable internet connection (phones are not allowable).
2. The computer must have a working microphone and camera and the camera must be turned on.
3. The student's face must be present in full frame. No background noise is allowed as this is distracting to the students in the classroom.
4. The student is responsible for contacting the instructor prior to class starting if they are sick or quarantined and need to use the Zoom option. This must be done with enough notice so the student using Zoom is ready for class when class starts.
5. If these conditions cannot be met, the student will be marked absent from class for the class period(s) missed.

*The only exception to not physically being in class is for students who are registered for online courses that are designated by OL (e.g. CSC 101 OL, PSY 111 OL, ENG 120 OL).

***Some courses are not available through Zoom, such as Tribal Arts, Heavy Equipment, Welding Technology, and others. Students in these classes must be physically present or will be counted absent.*

D. LATE ASSIGNMENT SUBMISSIONS

UTTC supports and fosters the student's responsibility for completing and submitting assignments on or before scheduled due dates and times. If an assignment is due, the student should make every effort to submit the assignment on time. Occasionally, a student may experience an unexpected life event that results in the submission of late work. Communication is the key. Instructors are more than willing to work with students in the event of an emergency if the student communicates with them before the date and time the assignment is due to make other arrangements.

Late assignment deadlines will vary among departments but will not exceed more than five (5) business days after which the assignment was initially due. Assignment due dates, late assignment deadlines, and late assignment penalties are outlined in course syllabi. Assignments not submitted by the initial deadline date will be reflected in the course gradebook as a zero (0) until the assignment has been submitted. The amount of points deducted for late work is at the discretion of the instructor. Assignments submitted via E-mail will not be accepted under any circumstances and will receive a grade of zero.

E. MISSED TEST, EXAMS AND QUIZZES (FORMAL ASSESSMENTS)

Students may not make up a missed test, exam or quiz without a valid reason for their absence (illness, family emergency). It is the student's responsibility to contact their instructors before the absence, or within 24 hours after missing the formal assessment. The instructor will review the reason the student missed and determine if the circumstance justifies the student being allowed to take the formal assessment. Approved make-up assessments must be taken outside of the student's regular class schedule and during a time and location agreed upon between the student and instructor. Students are not to miss another class in order to make-up an assessment for another course. If the student fails to show on the date and time of the makeup assessment, the student will not be permitted to reschedule the makeup and the assessment and will earn a 0% grade.

***The Teacher Education Department expects all assignments to be completed on the due data and time. Assignments will be accepted for half credit five instructional days after the due date. After this, assignments will receive a zero. Presentations are considered formal assessments and follow UTTC formal assessment policy.

F. EARLY ALERT SYSTEM

UTTC's Early Alert System (EAS) is a proactive, communication driven support system that provides timely identification and interventions to work with individual students to assist in generating plans to overcome challenges to college success. The system assists UTTC students by linking them to faculty and staff who can provide and connect students to available resources and strategies. The early alert serves as an opportunity for students to take ownership of their success and empower them to accomplish academic and personal goals. The system helps faculty and academic advisors connect and communicate with students as issues arise. The additional cross-wide partnerships create a culture of collaboration focused upon the best interest of UTTC students.

Academic related concerns such as attendance, missing assignments, or classroom behavior will result in an early alert being issued by faculty. When an early alert is issued, the student will receive an email requesting them to make arrangement to follow up with the instructor and/or their academic advisor. Students receiving an early alert should make the necessary arrangements to set up and meet with faculty as soon as possible to generate a plan of success.

G. ACADEMIC HONESTY

Students are expected to complete their own work. Academic dishonesty includes plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using course materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to dishonestly obtain grades, honors, awards, or professional endorsement; altering, forging, misrepresenting, or misusing an academic record; or fabricating or falsifying data,

research procedures, or data analysis. Refer to [Academic Affairs](#) policies and procedures handbook for further information.

H. STUDENTS WITH DISABILITIES

United Tribes Technical College recognizes its responsibility for making reasonable accommodations to ensure there is no discrimination on the basis of a disability. The Disabilities Services Office coordinates reasonable accommodations, support services, and appropriate referrals for the purpose of removing barriers and providing an equitable learning environment. If you have a disability, please contact the [Disabilities Services](#) (DS) office at (701) 221-1516 or email at dss@uttc.edu.

I. TITLE IX STATEMENT

Title IX is a federal civil rights law that prohibits discrimination on the basis of sex, including sexual harassment, rape and sexual assault. United Tribes Technical College is committed to upholding the law and standards that promote respect and human dignity in a safe environment. Sexual misconduct and relationship violence in any form violates UTTC's mission, cultural values, Student Code of Conduct, and may also violate federal and state law. If you or someone you know has been impacted by sexual assault, dating and domestic violence, stalking, or sexual exploitation, UTTC has resources available on the [Title IX website](#). you can find the appropriate resources on the UTTC campus and in the community

J. SOCIAL DISTANCING AND FACE MASKS

United Tribes Technical College understands the importance of the health and safety of our campus community. In an effort to serve our students and community members, we are taking continual efforts to reduce risk and increase cleanliness of our campus locations. As part of our effort to protect the campus community, all students, staff, and instructors are required to observe social distancing and wear face masks at all times while in the classrooms. Face masks will be available at the entrances of buildings and hand sanitizer will be available throughout each building.

Students who require accommodations should contact the Disability Services Office at dss@uttc.edu, or (701) 221-1516 to submit the appropriate documentation. Should you become sick or be required to quarantine during the semester, notify the instructor immediately using the contact method described in the syllabus. Students who require accommodations should contact the Disability Services Office to implement the appropriate accommodations required to submit course work during an extended absence.

K. TECHNOLOGY REQUIREMENTS

To ensure that you are using the recommended personal computer configurations, please refer to the [minimal technology requirements](#).

FACE-TO-FACE

PARTICIPATION / CLASS ENGAGEMENT

UTTC prepares students for the workforce by having high expectations for skills demonstrated in the classroom that transfer into future employment. This includes students' ability to be on time for class, to refrain from external distractions (cell phone usage, holding side conversations with other students), by providing positive contributions to class discussions, participating in individual or group activities, and being prepared for class. Students will be assessed during the semester on the ability to demonstrate these skills.

CELL PHONE

Out of respect for the other students and the instructor, it is advised that cell phones are turned off during class times. If the student is expecting an important phone call (e.g. case worker, Housing, clinic), the instructor must be informed ahead of time and the cell phone set to a silent ring. If such a phone call is received during class time, the student will answer the call by quietly removing him or herself from the classroom. This also includes texting during class; it is not acceptable. Students may not use class time to check social media accounts, voicemail, and/or personal emails.

STUDENT BEHAVIOR

UTTC students will conduct themselves in a responsible and respectful manner at all times in the classroom, in the hallways, in the Library, the Cafeteria, and any other location on campus. Student behavior that interferes with learning in the classroom will not be tolerated. This behavior includes chronic tardiness, threatening confrontations, intoxication, inappropriate physical contact, lewd or disrespectful language or gestures directed at the instructor or at fellow students, bullying, direct or indirect intimidation, and conversations with other students that are not related to classroom topics.

Faculty are expected to maintain professional management of classroom activities prior to, during and after class times. As such, if a student demonstrates behavior that disrupts or interferes with classroom activities, an instructor reserves the right to ask the student to leave the classroom, to contact campus security, to request mediation by the academic department chair or an academic/personal counselor, or to file a formal complaint subject to a student disciplinary hearing.

SCHEDULE

SPRING 2022

Week	Academic Topic Instructional Strategy	Support Materials, Book chapters, etc.	Assessment (Formative – Summative)
1 Jan 11 – 14	Review Syllabus Math Review	Chapters 1-3	Chapter 1-3 Doodle Notes Reality Math Activity
2 Jan 17 – 21	*No School 1/17 MLK	Chapter 4.1	What do you think? Reflections Exercises 4.1
	Understanding Multiplication of Whole Numbers		
3 Jan 24 - 28	Understanding Multiplication of Whole Numbers	Chapter 4.1 Chapter 4.2	Exercises 4.1 Exercises 4.2 What do you think? Reflections
	Understanding		

	Division of Whole Numbers		
4 Jan 31 – Feb 4	Understanding Multiplication and Division of Fractions	Chapter 4.3	Exercises 4.3 Mango Math
5 Feb 7 - 11	Understanding Multiplication and Division of Decimals and Integers	Chapter 4.4	Exercises 4.4 What do you think? Reflections
6 Feb 14 - 18	Ratio and Proportion	Chapter 5.1	Exercises 5.1 What do you think? Reflections 7 th Generation Math
7 Feb. 21 - 25	*No School 2/21 President's Day	Chapter 5.2	Exercises 5.2 What do you think? Reflections Short Lesson Plan
	Precents		
8 Feb 28 – Mar 4	Understanding Patterns, Relations, and Functions	Chapter 6.1	Exercises 5.2 What do you think? Reflections
9 Mar 7 - 11	Midterm Grades Due 3/11	Chapter 6.2	Exercises 6.2 What do you think? Reflections
	Representing and Analyzing Mathematical Situations and Structures Using Algebraic Symbols		
Mar 14 - 18	Spring Break – No Classes		
10 Mar 21 - 25	Using Mathematical Models to Represent and	Chapter 6.3	Exercises 6.3 What do you think? Reflections

	Understand Quantitative Relationships		7th Generation Math Activities
11 Mar 28 – Apr 1	Analyzing Change in Various Contexts	Chapter 6.4	Exercises 6.4 What do you think? Reflections Short Lesson Plan
12 Apr 4 - 8	Collecting, Organizing, and Displaying Data	Chapter 7.1	Exercises 7.1 What do you think? Reflections
13 Apr 11 - 15	*No School 4/15 Good Friday	Chapter 7.2	Exercises 7.2 What do you think? Reflections Mango Math
	Analyzing Data		
14 Apr 18 - 22	*No School 4/18 Easter Monday	Chapter 7.3	Exercises 7.3 What do you think? Reflections
	Using Data to Make Predictions		
15 Apr 25 - 29	Understanding Probability	Chapter 7.4	Exercises 7.4 What do you think? Reflections Boom Learning
16 May 2 – 6	Finals Week	Chapter 8	Boom Learning Presentations
	Geometry		
GRADES DUE	May 9th		