



ELED 4303 Mathematics in ECE (2-2)  
Fourth Semester (2<sup>nd</sup> 8 weeks)

**Instructor Information**

<b><i>Instructor:</i></b>
<b><i>Email:</i></b>
<b><i>Office Voice Mail Line:</i></b>
<b><i>Campus office hours:</i></b>
<b><i>Virtual Office Hours:</i></b>

**Course Description**

Principles of integration and examination of materials, methods, content, and assessment, and learning experiences associated with teaching mathematics in early childhood. Opportunities to demonstrate applications in field settings. Course will also address the instructional needs and appropriate assessment of all students in inclusive, multicultural, and multilingual classrooms for this content area.

**Student Learning Outcomes**

Upon successful completion of this course the student will:

1. Integrate PKCG and TEKS in a variety of curricula that are developmentally appropriate, student centered, and integrated across content areas.
2. Design and utilize assessments to evaluate student learning and use data to modify lessons accordingly.
3. Choose a variety of activity types to address student needs and learning styles.
4. Create a comprehensive unit for one grade level across all content areas.

**Pedagogy and Professional Responsibilities:**

<b>Knowledge</b>	<b>Skills</b>	<b>EC-3</b>	<b>TEKS</b>	<b><u>PKG</u></b>
<b>Standard 1</b> 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29, 1.30, 1.31	<b>Standard 1</b> 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29		<a href="#">MATH</a> <a href="#">TEKS</a>	Domain V
<b>Standard 2</b> 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12,	<b>Standard 2</b> 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12,			

2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23	2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21			
<b>Standard 3</b> 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16	<b>Standard 3</b> 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20			
<b>Standard 4</b> 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17, 4.18	<b>Standard 4</b> 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19			

### Textbook

Chaillé, C. and Davis, S. M. (2016). *Integrating Math and Science in Early Childhood Classrooms through Big Ideas: A Constructivist Approach*. Pearson. ISBN-13: 978-0-13-714579-9

### Course Evaluation

Course evaluation is determined by the following ratings:

Letter Grades & Percentages	Points
A = 100% - 90%	250-225
B = 89% - 80%	224-200
C = 79% - 70%	199-175
D = 69% - 60%	174-150
F = 59% and below	149-0

### Assignments and Possible Points:

Lesson Plan (3) 50 each – 150 pts  
 Field Experiences Reflection Journal – 100 pts  
 TOTAL – 250 pts

Unless students are informed otherwise, assignments will be graded within 7 days of due date.

### Professional Dispositions for Educators

Over the course of their preparation program, students are evaluated to ensure they are upholding the standards spelled out in the Professional Dispositions for Educators. This policy will apply to those students pursuing the Bachelor of Applied Science (BAS) in Early Childhood Education (ECE).

The Midland College (MC) Education Division focuses on preparing educators who respect differences, celebrate diversity, and demonstrate the requisite skills, knowledge, and dispositions expected of a professional in fostering student-centered learning environments. Dispositions are a vital component of teacher preparation and are defined as the “professional attitudes, values, and beliefs demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities.” (InTASC Model Core Teaching Standards and Learning Progressions for Teachers (2013), p.6). Prospective educators are expected to develop and practice these attitudes, values, and beliefs throughout their preparation.

Please refer to the Midland College Professional Dispositions for Educators for additional information.

### **Ethics**

The MC BAS in ECE expects that its students will abide by the Code of Ethics and Standard Practices for Texas Educators ([19 TAC Chapter 247](#)) and as outlined in Domain IV: Fulfilling Professional Roles and Responsibilities of the Pedagogy and Professional Responsibilities (PPR) Texas Examination of Educator Standards (TExES).

### **Resources**

TExES Preparation Manuals: [Certification Preparation Materials](#)  
161 [Pedagogy and Professional Responsibilities EC-12](#)  
[Science of Teaching Reading](#)  
[EC-3 Content](#)  
[State Board of Educator Certification](#)  
APA format for written work: [APA format](#)  
TEKS: [Texas Essential Knowledge and Skills](#)  
PKG: [Texas Prekindergarten Guidelines](#)

### **Course Technology**

Consistent with the State of Texas Standards for Texas Teachers and International Society for Technology in Education (ISTE), this course will emphasize “Technology Applications Standards I-IV. See [Educator Standards for Technology Applications](#). Students should be able to

- Use Canvas Management System
- Create Word and PowerPoint files using Microsoft Office Software
- Use email with attachments
- Use of appropriate antivirus utilities
- Have access to a media player

All interactions with other students and the instructor should be professional and courteous. See [Core Rules of Netiquette](#).

For additional information regarding course technology and resources, please go to your Candidate Toolkit.

### **Course Communications**

MC provides each student an email account to be used in communication with College personnel. This is the default e-mail used in Canvas unless changed by the student. Student are responsible for checking their e-mail, Canvas messaging and announcements.

The instructor will provide feedback on assignment submissions. Students are responsible for reviewing instructor feedback.

### **Student Responsibilities and Class Policies:**

#### **Attendance**

Attendance is expected. Excused absences and make-up work require instructor approval. Excessive absences, even if excused, may result in course failure.

#### **Assignment Submissions**

Assignments must be submitted in Canvas. Students are responsible for ensuring that assignments can be read in Canvas.

#### **Late Work**

Late work will not be accepted without instructor approval. The instructor may deduct points from late work.

#### **Scholastic Dishonesty**

Students are expected to maintain high academic standards, including being responsible for submitting original work. Information on scholastic dishonesty and the discipline process is in the *MC Catalog and Student Handbook*, [Scholastic Dishonesty section](#).

The instructor may use a tool called Turnitin to compare a student's work with multiple sources. The tool itself does not determine whether or not a paper has been plagiarized, that judgment will be made by the instructor.

#### **Field Experiences**

State law requires a background check for all individuals who work, volunteer, or have contact with children in a public school. The link is provided in the Canvas course. Students will not be able to schedule their field experiences until the background check is completed and approved.

After approval, students are responsible for scheduling appointments for field experiences. Students may schedule experiences only where assigned. During field experiences, students must wear an MC ID and follow all site rules and guidelines.

For additional information regarding Field Experiences, please refer to the [Field Experiences and Student Teaching Manual](#). ([link](#))

### **Title IX: Non-Discrimination Statement**

MC does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding non-discrimination policies:

Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 131,  
Midland, Texas 79705 (432) 685-4781, [tbaker@midland.edu](mailto:tbaker@midland.edu)

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

### **Americans with Disabilities Act (ADA) Statement**

MC provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit [www.midland.edu/accommodation](http://www.midland.edu/accommodation) and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

### **Support Our Students**

The Support Our Students (SOS) program helps MC students enrolled in credit courses stay in school by assisting them with emergency non-academic needs. For more information on SOS services see the web site: <https://www.midland.edu/services-resources/student-services/sos.php>

### **Cell Phone Rules**

All cell phones must be silenced during class. Students may not text during class. Instructor permission is required for audio or video recording of classes.

### **Grade Appeal**

Procedures for grade appeal can be found in the MC *Catalog & Student Handbook*, [Grievances and Complaints](#) section.

### **Course Schedule**

This course is offered over 8 weeks. This is an estimate and is subject to the instructor's discretion and may be changed.

Week Student Learning Outcome(s) (SLOs)	Readings and Preparation for This Week's Class	In Class Discussions/ Activities	Assignments (Points)	Due Dates
1  SLOs: 3	<ul style="list-style-type: none"> <li>• (Chaillé &amp; Davis, 2016).</li> <li>• <b>Ch. 1</b></li> <li>• Constructivist Curriculum Framework</li> <li>• <b>Ch. 2</b></li> <li>• Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Syllabus</li> <li>• Course Expectations</li> <li>• Ethics and Dispositions</li> <li>• Field Experience</li> <li>• Assignments</li> <li>• <b>Discussion/Activities</b> <b>What</b> are 3 principles of assessment in math should teachers of young children understand?</li> </ul>		
2  SLOs: 3	<ul style="list-style-type: none"> <li>• <b>Ch. 3</b></li> <li>• Creating an Environment for Math and Science Integration</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussion/Activities:</b></li> <li>• Students write about how they personally feel about math and what their experiences have been in school related to math.</li> </ul>	<b>Lesson Plan: (50 pts)</b>	Monday by midnight
3  SLOs 3	<ul style="list-style-type: none"> <li>• <b>Ch. 4</b></li> <li>• Patterns</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussion/Activities:</b></li> <li>• Pattern cards</li> <li>• <b>What is place value?</b> (p. 97)</li> </ul>		
4  SLOs: 1, 2, 3, 4	<ul style="list-style-type: none"> <li>• <b>Ch. 5</b></li> <li>• Transformation</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussion/Activities:</b></li> <li>• Estimations – Activity</li> <li>• <b>The value of play</b> – Scenario Discussion (p. 108)</li> </ul>	• <b>Lesson Plan: (50 pts)</b>	Monday by midnight
5  SLOs: 1, 2, 3, 4	<ul style="list-style-type: none"> <li>• <b>Ch. 6</b></li> <li>• Movement</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussion/Activities:</b></li> <li>• Marble rollways – Activity</li> <li>• <b>Fractions in the classroom</b> – Activity</li> </ul>		

Week Student Learning Outcome(s) (SLOs)	Readings and Preparation for This Week's Class	In Class Discussions/ Activities	Assignments (Points)	Due Dates
6  SLOs: 1, 2, 3, 4	<ul style="list-style-type: none"> <li>• <b>Ch. 7</b></li> <li>• Balance and Symmetry</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussion/Activities:</b></li> <li>• Balance games – Activity</li> <li>• Explore transitivity – Activity</li> <li>• Describe one activity that would support a child's understanding of balance.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Lesson Plan: (50 pts)</b></li> </ul>	Monday by midnight
7  SLOs: 1, 2, 3, 4	<ul style="list-style-type: none"> <li>• <b>Ch. 8</b></li> <li>• Relationships</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Discussion/Activities:</b></li> <li>• Classification – Discussion</li> <li>• Why doesn't Charlie ask the children to classify them into multiple groups? (p. 191)</li> </ul>		
8  SLOs: 1, 2, 3, 4	<ul style="list-style-type: none"> <li>• <b>Ch. 9</b></li> <li>• Developing Your Own Curriculum: Big Ideas and Planning</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Field Experience Reflection (100 pts)</b></li> </ul>	Monday by midnight

**Please note that the instructor reserves the right to change the syllabus.**