

## Early Childhood/Elementary Inclusive Education Mathematics Sample Sequence Fall 2025

College Core\* Academic dual major - 8 units Electives - 1-2 units 9 Credits toward TOSD

Year 1	
<ul style="list-style-type: none"> <li>● MAT 105 Structures &amp; Algorithm for Education (Quantitative Reasoning)</li> <li>● BIO 104 Inquiries in the Life Sciences (Natural Science)</li> </ul>	
<ul style="list-style-type: none"> <li>● FYS (College Core)</li> <li>● ELE 203 Foundations of Inclusive Education (race/ethnicity)</li> <li>● MAT 127 Calculus A</li> <li>● MAT 099 Orientation to Mathematics and Statistics</li> </ul>	<ul style="list-style-type: none"> <li>● HIS 198 Teaching American History or approved US History course (Historical Perspectives)</li> <li>● SLP 102 Speech and Language Dev</li> <li>● MAT 128 Calculus B</li> </ul>
Year 2	
<ul style="list-style-type: none"> <li>● STA 216 Statistical Inference and Probability (fall only) or *MAT 212 Data Analysis and Probability for Middle School Teachers</li> <li>● MAT 205 Linear Algebra</li> <li>● MAT 200 Proof Writing through Discrete Math</li> </ul>	
<ul style="list-style-type: none"> <li>● ECE/ELE 102 Multicultural Children's Literature (LVPA)</li> <li>● ELE 113 The Arts in Early Childhood and Elementary Classrooms (VPA)</li> <li>● ELE 201 Child and Adolescent Development (Behavioral, Social or Cultural Perspectives)</li> </ul>	<ul style="list-style-type: none"> <li>● SPE 214 Building and Sustaining Inclusive Classroom Communities</li> <li>● SPE 322 Assessment, Planning and Methods for Inclusive Practices (full day joint field experience)</li> </ul>
Year 3	
<ul style="list-style-type: none"> <li>● MAT 211 Number Theory and Systems for Middle School Teachers or MAT 301 Number Theory^ (spring only)</li> <li>● MAT 351 Geometry^(fall only) or *MAT 215 Geometry for Middle School Teachers</li> </ul>	
<ul style="list-style-type: none"> <li>● RAL 220 Methods of Teaching Literacy I (4th hour field experience)</li> <li>● ECE 202 Theories &amp; Phil of Early Ch Ed or Elective</li> <li>● MAT 305 Abstract Algebra (fall only)</li> </ul>	<ul style="list-style-type: none"> <li>● RAL 320 Methods of Teaching Literacy II</li> <li>● MTT 202 Teaching Mathematics in the Early Childhood and Elementary Classroom (full day joint field experience)</li> <li>● *Elective (MAT 497 recommended)</li> </ul>
Year 4	
<ul style="list-style-type: none"> <li>● ECE/ELE 301 Clinical I (two-days a week plus two full weeks field experience)</li> <li>● MST 202 Science Methods</li> </ul>	<ul style="list-style-type: none"> <li>● ECE/ELE 490 Clinical II (2 units)</li> <li>● ELE 498 Student Teaching Seminar - Capstone Writing</li> </ul>

<ul style="list-style-type: none"> <li>• SOM 203 Teaching Social Studies from a Multicultural Perspective</li> </ul>	<b>30 units</b> <b>BS with K-6 certification or</b> <b>BS with P-3 and K-6 certification</b>
--	--

\*other Core requirements can be met through the dual major

^Must take at least two 300 Level Mathematics courses, including MAT 305

\*The courses for middle school teachers may be offered in a different semester.

**Mathematics courses in new Inclusive Education program:**

0 credit course unit MAT 099 - Orientation to Mathematics and Statistics

1. MAT 127 - Calculus A
2. MAT 128 - Calculus B
3. MAT 200 - Proof Writing through Discrete Math
4. MAT 205 - Linear Algebra
5. MAT 212 or STA 216 - Data Analysis and Probability for Middle School Teachers or Statistical Inference and Probability
6. MAT 305 - Abstract algebra
7. MAT 215 or 351 - Geometry for Middle School Teachers or Geometry
8. MAT 211 or 301 - Number Theory and Systems for Middle School Teachers or Number theory

At least one of above two courses must be the 300 level course

Highly recommended as elective: MAT 497 - Topics in Secondary Mathematics from an Advanced Viewpoint (especially for anyone seeking K-12 Mathematics certification)