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

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

Year 1	
<ul> <li>MAT 105 Structures &amp; Algorithm for Education (Quantitative Reasoning)</li> <li>BIO 104 Inquiries in the Life Sciences (Natural Science)</li> </ul>	
<ul> <li>FYS (College Core)</li> <li>ELE 203 Foundations of Inclusive Education (race/ethnicity)</li> <li>MAT 120 PreCalculus</li> <li>MAT 099 Orientation to Mathematics and Statistics</li> </ul>	<ul> <li>HIS 198 Teaching American History or approved US History course (Historical Perspectives)</li> <li>SLP 102 Speech and Language Dev</li> <li>MAT 127 Calculus A</li> </ul>
Year 2	
<ul> <li>MAT 205 Linear Algebra</li> <li>MAT 200 Proof Writing through Discrete Math</li> </ul>	
<ul> <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> <li>MAT 128 Calculus B</li> </ul>	<ul> <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> <li>MAT 211 Number Theory and Systems for Middle School Teachers or MAT 301 Number Theory<sup>^</sup> (spring only)</li> <li>MAT 351 Geometry<sup>^</sup> (fall only) or *MAT 215 Geometry for Middle School Teachers</li> <li>STA 216 Statistical Inference and Probability (fall only) or *MAT 212 Data Analysis and Probability for Middle School Teachers</li> </ul>	
<ul> <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> <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> </ul>
Year 4	
<ul> <li>ECE/ELE 301 Clinical I (two-days a week plus two full weeks field experience)</li> </ul>	<ul> <li>ECE/ELE 490 Clinical II (2 units)</li> <li>ELE 498 Student Teaching Seminar - Capstone Writing</li> </ul>

<ul> <li>MST 202 Science Methods</li> <li>SOM 203 Teaching Social Studies from a Multicultural Perspective</li> </ul>	31 units BS with K-6 certification or BS with P-3 and K-6 certification
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\*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)