## LOWER ELEMENTARY MATHEMATICS CERTIFICATE, UNDERGRADUATE

This certificate provides specialization in mathematics education for Early Childhood Education and Elementary Education majors. The certificate supports development of students' pedagogical content knowledge and mathematical knowledge for pre-kindergarten through 3rd grade.
Note: the courses in this program have prerequisites.
Note: the prerequisite for MATH 313 is MATH 114 or MATH 210.

| Required Courses |  |  |
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| MATH 208 | MATHEMATICS FOR ELEMENTARY TEACHERS I | 5 |
| MATH 209 | MATHEMATICS FOR ELEMENTARY TEACHERS II | 4 |
| Required Electives-choose two from the following | $\mathbf{6 - 8}$ |  |
| MATH 313 | PATTERNS, RELATIONS AND ALGEBRAIC |  |
| MTED 425 | THINKING FOR PRIMARY TEACHERS |  |
| ASSESSMENT IN THE MATHEMATICS |  |  |
| MTED 476 | CLASSROOM |  |

