

**Program of Study: Bachelor of Science Education in Mathematics**

<p>SLG 1: <i>Pre-service secondary mathematics teachers will demonstrate and apply knowledge of the core mathematics content as applicable to its instruction</i></p>	<p><i>SLO 1:</i> Solve problems that require application of their knowledge of algebra, geometry, probability and statistics, mathematical systems, history, and calculus.</p>	<p>Courses/experiences: All core program math courses</p>
	<p><i>SLO 2:</i> Articulate mathematical concepts and effectively communicate them to students using appropriate mathematical vocabulary and terminology.</p>	<p>Courses/experiences: Geometry (M330), Algebra for Secondary Teachers (M325), Methods (M391), Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493)</p>
<p>SLG 2: <i>Pre-service secondary mathematics teachers will apply knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains</i></p>	<p><i>SLO 3:</i> Manage the classroom environment to provide safe and positive learning experiences.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493)</p>
	<p><i>SLO 4:</i> Present well-planned lessons conducive to student learning using multiple teaching strategies.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493)</p>
	<p><i>SLO 5:</i> Assess student learning of mathematics using both formal and informal methods of assessment.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493)</p>
	<p><i>SLO 6:</i> Deliver instruction that incorporates multiple learning modalities, including adaptations to address diverse learning needs.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493)</p>
	<p><i>SLO 7:</i> Students demonstrate they are prepared to teach mathematics to students in a variety of grades (5 -12) and in a variety of settings.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Methods (M391), Student Teaching (ED 493)</p>
<p>SLG 3: <i>Pre-service secondary mathematics teachers will analyze and consider research in planning for and leading students in rich mathematical learning experiences</i></p>	<p><i>SLO 3:</i> Manage the classroom environment to provide safe and positive learning experiences.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493)</p>
	<p><i>SLO 8:</i> Students are prepared to teach mathematics to students in a variety of grades (5 -12) and in a variety of settings.</p>	<p>Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Methods (M391), Student Teaching (ED 493)</p>

	<i>SLO 9:</i> Identify professional associations for all teachers and for mathematics teachers and state benefits of membership in such associations.	Courses/experiences: Methods (M391), Student Teaching Seminar (ED 483)
<i>SLG 4: Pre-service secondary mathematics teachers will select and use appropriate instructional tools and make appropriate decisions about when such tools enhance teaching and learning</i>	<i>SLO 3:</i> Manage the classroom environment to provide safe and positive learning experiences.	Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493)
	<i>SLO 4:</i> Present well-planned lessons conducive to student learning using multiple teaching strategies.	Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493), Algebra for Secondary Teachers (M 325)
	<i>SLO 10:</i> Incorporate technology in the teaching and learning of mathematics to enhance students' learning and understanding of mathematics.	Courses/experiences: Secondary Math Practicum (M381), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493), Algebra for Secondary Teachers (M 325)
	<i>SLO 5:</i> Assess student learning of mathematics using both formal and informal methods of assessment.	Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493), Geometry (M 330)
	<i>SLO 6:</i> Deliver instruction that incorporates multiple learning modalities, including adaptations to address diverse learning needs.	Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493)
	<i>SLO 8:</i> Students are prepared to teach mathematics to students in a variety of grades (5-12) and in a variety of settings.	Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493)
<i>SLG 5: Pre-service secondary mathematics teachers will demonstrate the interconnectedness of mathematical ideas and how they build on one another</i>	<i>SLO 1:</i> Solve problems that require application of their knowledge of algebra, geometry, probability and statistics, mathematical systems, history, and calculus.	Courses/experiences: All core math program courses
	<i>SLO 2:</i> Articulate mathematical concepts and effectively communicate them to students using appropriate mathematical vocabulary and terminology.	Courses/experiences: Secondary Math Practicum (M381), Clinical III (ED 284L), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493), Algebra for Secondary Teachers (M 325), Geometry (M330)

	<i>SLO 4:</i> Present well-planned lessons conducive to student learning using multiple teaching strategies.	Courses/experiences: Secondary Math Practicum (M381), Clinical IV (ED 321L), Clinical V (ED 323L), Student Teaching (ED 493)
	<i>SLO 10:</i> Incorporate technology in the teaching and learning of mathematics to enhance students' learning and understanding of mathematics.	Courses/experiences: Secondary Math Practicum (M381), Clinical IV (ED 321L), Clinical V (ED 323L), Methods (M391), Student Teaching (ED 493), Algebra for Secondary Teachers (M 325)
<i>SLG 6: Pre-service secondary mathematics teachers will plan, provide, and implement elements relevant to their efforts and those of their students while communicating and making connections to other content areas by using high quality tasks to guide discussions for clarification and conceptual understanding</i>	<i>SLO 2:</i> Articulate mathematical concepts and effectively communicate them to students using appropriate mathematical vocabulary and terminology.	Courses/experiences: Student Teaching (ED 493)
	<i>SLO 4:</i> Present well-planned lessons conducive to student learning using multiple teaching strategies.	Courses/experiences: Student Teaching (ED 493)
	<i>SLO 10:</i> Incorporate technology in the teaching and learning of mathematics to enhance students' learning and understanding of mathematics.	Courses/experiences: Student Teaching (ED 493)
	<i>SLO 5:</i> Assess student learning of mathematics using both formal and informal methods of assessment.	Courses/experiences: Student Teaching (ED 493)
	<i>SLO 6:</i> Deliver instruction that incorporates multiple learning modalities, including adaptations to address diverse learning needs.	Courses/experiences: Student Teaching (ED 493)
	<i>SLO 9:</i> Identify professional associations for all teachers and for mathematics teachers and state benefits of membership in such associations.	Courses/experiences: Student Teaching (ED 493)

We have 10 unique learning outcomes that overlap goals. Preference is to identify the overlap rather than renumber for each goal.