

Secondary Mathematics Education

Students studying to become a high school educator choose an area of concentration and are able to teach grades 9-12. Students complete core course work required by all teacher education majors and required content area course work.

Program Learning Outcomes

1. Exhibit a deep understanding of subject matter, embrace the latest technological advancements, and showcase advanced pedagogical skills, all while integrating restorative practices and cultural responsiveness into teaching across various content areas and grade levels.
2. Create a nurturing and safe learning space that creates a sense of belonging and ensures every student feels valued and respected.
3. Design and deliver dynamic instruction, enriched with relevant technology, to foster an engaging learning environment that caters to the diverse needs of all students, while emphasizing cultural responsiveness in every aspect of teaching.
4. Uphold the highest standards of professional ethics.
5. Partner, collaborate, and engage with families and/or communities to develop relationships and build networks of support for student success.
6. Actively advocate for students, families, and schools to support equity and social justice.
7. Apply research-driven strategies to improve teaching methods and student learning outcomes, focusing on practices that promote equity in the classroom.

Requirements

School of Education Core ¹

EDL 456	Strategies for Teaching Students with Learning Difficulties and (Dis)abilities	3
EDL 493	Cross-Cultural Studies for Multilingual Students and Families	3
TEP 207	Foundations of American Education ²	3
TEP 222	Child and Adolescent Development for Teachers	3
TEP 224	Survey of Exceptional Children in Schools	3
TEP 227	Educational Psychology for Teachers	3
TEP 301	Induction into Teacher Education	1
TEP 305	Technology For Teaching	3
TEP 315	Classroom Community and Belonging	3
TEP 318	Curriculum Theory and Development	3
TEP 419	Content Area Literacy Methods	3
TEP 475	Cultural Studies and Identity in Education	3
TEP 448	Student Teaching Seminar	3
TEP 450	ECCE: Student Teaching ³	9
Total Hours		46

Content Courses

TEP 415	Teaching and Assessment in Secondary Schools	3
TEP 431	Topics in Mathematics for Middle & Secondary Teachers	3
TEP 436	Mathematics Methods for Middle and Secondary Grades	3

Mathematics Courses

MAT 103	Trigonometry	2
MAT 115	Calculus I ⁴	4
MAT 116	Calculus II ⁴	4
MAT 302	Discrete Mathematics ⁴	4
or CSC 302	Discrete Structures	
MAT 332	Linear Algebra	4
MAT 401	History Of Mathematics	4
MAT 403	Abstract Algebra	4
MAT 421	Statistical Methods	4

Total Hours **39**

¹ TEP 301 is a prerequisite for all TEP 400 Level courses.

² This course fulfills a general education requirement at UIS in the area of Social and Behavioral Sciences.

³ This course fulfills an Engaged Citizenship Common Experience requirement at UIS in the area of Engagement Experience.

⁴ This course fulfills a general education requirement at UIS in the area of Mathematics.