Teaching and Learning

The Master of Arts in Teaching and Learning (MATL) is designed for adult career-changers who are committed to teaching in at-risk schools. University College, the Institute for School Partnership, and the St. Louis Teacher Residency (STLTR) program collaborate to train and support aspiring teachers who, in turn, will accelerate student achievement.

The first year of the program is facilitated by STLTR. Students must spend one year working with an experienced mentor teacher in a high-needs classroom developing the skills needed to be a leader in the classroom. Residents also take classes focused on the core competencies needed to have a successful career in teaching. By joining STLTR, students make a commitment to serve the learners and families in St. Louis–area public schools.

At the end of the first-year residency, students earn their teacher certification. During the second year, residents teach in their partner school districts while completing their master’s degrees at University College. Master's pedagogical course work continues to support and inform the student's classroom teaching, and it is complemented by subject-specific courses. After completing the master's degree, participants commit to teaching for two additional years in their home districts, and they receive continued support from STLTR staff during their early years of teaching.

The required courses include:

- U08 Educ 5125: Advanced Teaching Methods: Elementary (3 units)
- U08 Educ 5126: Advanced Teaching Methods: Secondary English/Language Arts (3 units)
- U08 Educ 5127: Secondary Mathematics (3 units)
- U08 Educ 5128: Advanced Teaching Methods: Secondary Science (3 units)

Students earn their teacher certification. They are required to complete an additional 21 units for the master's degree.

Degree Requirements

Master of Arts in Teaching and Learning

Students are required to complete the first-year residency with STLTR to earn their teacher certification. They are required to complete an additional 21 units for the master’s degree.

Required Courses (12 units)

- U08 Educ 524: Supporting Special Populations (3 units)
- U08 Educ 51XX: Advanced Teaching Methods I (3 units) (5125 Elementary, 5126 Secondary English/Language Arts, 5127 Secondary Mathematics or 5128 Secondary Science)
- Coming soon: Advanced Teaching Methods II (3 units)

Elective Courses (9 units)

Students tailor their degree by taking additional courses in education or in subject-specific areas such as English, math or biology.

Courses

Visit online course listings to view semester offerings for U08 Educ (https://courses.wustl.edu/CourseInfo.aspx?sch=U&dept=U08&crslvl=5:8).

U08 Educ 5125 Advanced Teaching Methods: Elementary

In this course, students will continue to refine their vision for high-quality instruction in an elementary Language Arts and Mathematics classroom. Language Arts: Students will build upon their understanding of best practices in elementary literacy by designing the structure for a balanced literacy block in their classrooms. These literacy blocks include instructional time devoted to explicit phonics instruction, shared reading, guided reading, read-aloud instruction, and vocabulary instruction. Students will also focus on writing instruction and will implement writing mini-lessons and student conferences in their classrooms. Mathematics: This course will also build on students' understanding of effective mathematics instruction and their knowledge of both direct instruction and inquiry-based approaches to learning. Students will explore effective instructional strategies through the lens of content, with a core focus in basic operations (addition, subtraction, multiplication, and division); geometry, fractions and measurement, problem-solving, algebra, and graphing. By analyzing instruction through the lens of specific mathematical concepts, students will have the opportunity to design lessons that focus on the connections between mathematical content as well as the standards for mathematical practice. Students must have instructor approval to register. Credit 3 units.

U08 Educ 5126 Advanced Teaching Methods: Secondary English/Language Arts

In this course, students will continue to refine their vision for high-quality English/language arts (ELA) instruction in a secondary classroom. This course will build upon students' understanding of effective novel studies and writing units by focusing on the fundamentals of close reading, word study, embedded nonfiction, and “writing for reading” strategies. Sophisticated discussions are also one of the hallmarks of advanced practice in ELA classrooms. Middle and high school students must be able to fluently use academic language and internalize habits of discussion. This course will also focus on the role of discussion in an ELA classroom, and students will implement multiple discussion formats, including Socratic Seminars and Literature Circles. Students in this course will also revisit the concept of rigor in a secondary ELA classroom by discussing the importance of text selection, studying text attributes and leveling systems, and analyzing the text selections embedded in their school’s curriculum. Students must have instructor approval to register. Credit 3 units.
U08 Educ 5127 Advanced Teaching Methods: Secondary Mathematics
In this course, students will continue to refine their vision for high-quality mathematics instruction in a secondary classroom. Students will revisit the fundamental design elements present in inquiry-based lessons, focusing on the development of their students' conceptual understandings. The course will also focus on the importance of computational and procedural fluency, and students will create a backwards plan that allows for daily fluency practice within their classrooms. Moving beyond fundamental lesson planning and assessment structures, students in this course will learn specific strategies to develop and assess students' problem-solving skills and abilities and to implement effective discourse in their mathematics classrooms. Students will design instructional activities that allow their students to explore and discuss challenging problems and tasks through structures such as problem-solving seminars and performance-based assessments. Students must have instructor approval to register.
Credit 3 units.

U08 Educ 5128 Advanced Teaching Methods: Secondary Science
In this course, students will continue to refine their vision for high-quality science instruction in a secondary classroom. Moving beyond fundamental lesson planning and assessment structures, students in this course will learn specific strategies to develop and assess students' problem-solving skills and abilities and to implement effective discourse in their science classrooms. Students will design instructional activities that allow their students to explore and discuss challenging problems and tasks through structures such as problem-solving seminars and performance-based assessments. Students must have instructor approval to register.
Credit 3 units.

U08 Educ 524 Supporting Special Populations
This course will focus primarily on the skills teachers need to effectively serve students with disabilities and English-language learners. The course will first focus on developing the foundational knowledge, skills, and strategies for teaching students with special needs. Candidates will explore special education history and laws, theoretical concepts, and instructional practices that facilitate the integration and support of students with special needs in the general education classroom. This course focuses on the inclusion of students with high-incidence disabilities, with the understanding that an inclusive framework can be applied to support students with other disabilities and a variety of learning needs. In this course, students will also be introduced to the historical, political, and legal foundations of educational programs for English learners. The course will provide an overview of theories of second-language learning and research on the effectiveness of various means of promoting academic achievement in linguistically diverse contexts. Students will also be equipped with a repertoire of methods to facilitate and measure students' growth in English language and literacy and to create learning environments that promote content area learning through the use of integrated English language development.
Credit 3 units.

U08 Educ 5140 MATL Capstone Seminar I
The MATL Capstone Seminar will be taught over the course of two semesters to prepare students for their final capstone presentation and portfolio at the conclusion of the second semester. When the school year begins, students will embark on the important work of getting to know their students and their school setting. Building on their knowledge of data-driven instruction, students will use the information gained about their teaching placement in order to set ambitious goals for their students' success. Students will also use investment and engagement strategies to launch their vision and performance goals with students. Throughout the semester, students will also acquire new skills related to data analysis and remediation. On a biweekly basis, students will have data check-ins with their course instructors to ensure that students are on track to meet their goals. Students must have instructor approval to register.
Credit 1.5 units.

U08 Educ 5141 MATL Capstone Seminar II
The MATL Capstone Seminar will be taught over the course of two semesters. In the spring, students will begin drafting their Master's Capstone. Students will curate a Capstone portfolio, displaying their best work from the past two years of teaching. Students will also report on students' final academic achievement and socioemotional growth results. In sum, the final Capstone will consist of the Capstone portfolio, a film of an outstanding lesson, the presentation of a data narrative, and the delivery of an oral defense. For the oral defense, students will present and defend their K-12 students' growth and achievement data as well as key learning from their residency and master's course work to faculty members and guests. Students must have instructor approval to register.
Credit 1.5 units.