

# TEACHING AND LEARNING (TLRN)

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## **TLRN 500 Computational Thinking in K-12 (3 credits)**

The course is for practicing teachers and provides an introduction of the principles and practices of computational thinking (CT). This course is appropriate for teachers who seek to understand how computational principles complement any curricular discipline or field of study. The course does not require any background in computing or programming beyond simple computer skills to write emails, browse the web, or complete assignments. May be repeated for a maximum of 9 credits.

## **TLRN 501 Equity in Computer Science Education (2 credits)**

Computer science for all students requires that educators advocate for and be responsive to the existing inequities in computer science. Rather than maintaining the status quo, this course challenges teachers to problematize existing structures that marginalize under-represented students in computer science based on race, gender, language, and ability/disability. This course will examine responsive and intentional strategies to increase access and opportunities for all students to learn computer science as part of an equitable and socially just education. May be repeated for a maximum of 8 credits.

## **TLRN 502 Methods of Inclusive CS Teaching (3 credits)**

This course supports teachers in developing effective strategies for teaching and retaining students through culturally relevant and inclusive computer science pedagogies. The course begins with a foundational understanding of the CS Framework and International Society of Technology in Education (ISTE) standards and builds upon computer science and computational thinking approaches to learning across disciplines. Teachers develop engaging and rigorous learning experiences informed by Universal Design for Learning (UDL) to develop instruction for students to analyze the pros and cons of our technological world critically. Teachers create lesson plans with formative and summative assessments to measure student progress, inform and improve instruction, and learn how to provide feedback for student learning. May be repeated for a maximum of 9 credits.

## **TLRN 513 In-Service Graduate Clinical Practice I (1 credit)**

Restriction(s): Open only to post-baccalaureate and graduate students admitted to the MSU Alternate Route Teacher Education program. This course provides a highly qualified classroom observer to visit, observe, and provide formative feedback to teacher candidates in their district of hire.

## **TLRN 514 In-Service Graduate Clinical Practice II (1 credit)**

Prerequisite(s): TLRN 513. Restriction(s): Open only to post-baccalaureate and graduate students admitted to the MSU Alternate Route Teacher Education program. This course provides a highly qualified classroom observer to visit, observe, and provide formative feedback to teacher candidates in their district of hire.

## **TLRN 515 In-Service Graduate Clinical Practice III (1 credit)**

Prerequisite(s): TLRN 514. Restriction(s): Open only to post-baccalaureate and graduate students admitted to the MSU Alternate Route Teacher Education program. This course provides a highly qualified classroom observer to visit, observe, and provide formative feedback to teacher candidates in their district of hire.

## **TLRN 523 Understanding Community Cultural Wealth in the Service of Urban Teaching (9 credits)**

Restriction(s): This course is available only to students who have been accepted into the new Urban Teacher Residency Program. This course engages students with community-based institutions and services within Newark and Orange to help residents develop an asset based view of these cities. Residents study the political and social history of Newark/Orange through understanding the distinct neighborhoods and learning the roles of effective Newark/Orange community-based organizations. Through working with community based organizations, residents become familiar with the challenges and resiliency of the local community. They also learn how the issues facing the community can become the foundation of curriculum across the disciplines in order to develop culturally sustaining pedagogy. Through coursework coupled with community study, residents develop an understanding of antiracism and social justice that becomes the foundational lens of the residency. They engage in professional development activities, readings, and academic activities across the disciplines that accompany the internship. During this semester, residents also develop an understanding of child and adolescent development and disability studies to prepare them to think inclusively about meeting the needs of all learners. They work with P-12 students in summer internships to apply their learning. Residents meet with cohort faculty to reflect and assess individual progress, and plan learning goals for the next semester.

## **TLRN 524 Foundations of Inclusive Social Justice Curriculum and Assessment (6-9 credits)**

Prerequisite(s): TLRN 523. Restriction(s): Available only to students who have been accepted into the new Urban Teacher Residency Program. This course focuses on the intersections of curriculum development, student assessment, and inclusion. Through a combination of classroom practice and academic study, residents acquire knowledge, skills and dispositions to build inclusive classroom communities, plan and implement short- and long-term instruction to meet diverse student needs, incorporate family and community cultures and languages into the classroom, implement practices specific to their content area certification, develop a range of formative assessments for student learning, and use assessment data to inform practice. Residents are introduced to a range of transformative teaching approaches such as culturally relevant/sustaining pedagogies, ethnic studies and healing-centered engagement. In addition, residents develop specific strategies such as Universal Design for Learning and differentiated instruction to work with students with a range of disabilities. Additionally, residents participate in a weekly seminar and are observed by university education, subject area, and school-based faculty. Residents document their ongoing work and reflect on progress through an electronic portfolio.

**TLRN 525 Transformative and Inclusive Teaching Methods (9 credits)**

Prerequisite(s): TLRN 523 and TLRN 524. Restriction(s): Available only to students who have been accepted into the new Urban Teacher Residency Program. This course focuses on the intersections of curriculum development, student assessment, and inclusion. Through a combination of classroom practice and academic study, residents acquire knowledge, skills and dispositions to build inclusive classroom communities, plan and implement short- and long-term instruction to meet diverse student needs, incorporate family and community cultures and languages into the classroom, develop a range of formative assessments for student learning, and use assessment data to inform practice. By drawing from academic, classroom-based, and technological resources, residents learn to plan a long-term integrated curriculum unit, implement and critique existing curricular approaches, investigate and document the academic skills, strengths and needs of individual students, and reflect on the complexities of teaching and learning practices. In addition, residents develop specific strategies for working with children with a range of disabilities. These strategies are developed primarily through an apprenticeship with a classroom-based mentor in their grade or subject area during which residents co-teach the mentor's full teaching assignment, develop and teach units and lessons, and collaboratively engage in assessment with the mentor. Additionally, residents participate in a weekly seminar and are observed by university education, subject area, and school-based faculty. Residents document ongoing work and reflect on progress through an electronic portfolio.

**TLRN 526 Transformative Teaching Praxis in the Service of Urban Schools (9 credits)**

Prerequisite(s): TLRN 523, TLRN 524 and TLRN 525. Restriction(s): Available only to students who have been accepted into the new Urban Teacher Residency Program. This course focuses on assessing and building on students' prior knowledge, strengths, and needs. It additionally hones in on planning curriculum and instruction, and teaching across multiple content areas. Residents learn to use student data to plan universally designed and/ or differentiated instruction based on assessments of students learning needs as well as linguistic differences. They explore how students' learning histories affect their classroom achievement and learn about students' lives outside the classroom. They also engage in various curriculum and instruction approaches, examining how students do their best learning, gather data about what student learning looks like through formal and informal assessments, and create action plans for addressing the learning needs of students. Additionally, residents participate in a weekly seminar and are observed by university education, subject area, and school-based faculty.

**TLRN 527 Inquiry and Reflection: Transformative Inclusive Teaching and Practice in Urban Classrooms (7 credits)**

Prerequisite(s): TLRN 523, TLRN 524, TLRN 525 and TLRN 526. Restriction(s): Available only to students who have been accepted into the new Urban Teacher Residency Program. This course focuses on the resident's role as researcher and reflective practitioner. Teacher residents use an inquiry lens to organize the classroom, develop a positive environment, and plan for student learning. Teacher residents demonstrate pedagogical and content knowledge in designing and implementing classroom learning experiences, assessments, and units of study. Teacher residents explore the triumphs and challenges of families with children with disabilities and focus on partnerships with parents. They evaluate their teaching effectiveness and adjust their instruction based on monitoring learning through observational, formative, and summative assessments. The course gives special attention to supporting universal design for learning and/or differentiated instruction through the use of educational technologies and other instructional strategies. Teacher residents engage in professional relationships with all members of the school community and are actively involved in building partnerships with families. Teacher residents take on responsibility for curriculum and all classroom-related tasks. They develop and present their cumulative learning portfolio to other professionals and are observed and assessed by university and school based faculty.

**TLRN 684 Conducting Self-study and Action Research as Teacher Leaders (3 credits)**

Corequisite(s): TLRN 686. Restriction(s): Admitted to the Teacher Leadership Endorsement Program. This course guides teacher leaders to develop a form of inquiry that parallels their understandings of teaching and learning. It provides teacher leaders with the tools and resources necessary to examine their own practice as the center of their investigation and later share their findings with other teacher leaders. Participating in a cycle of inquiry, teachers design a self-study or action research project that focuses on an authentic question that has emerged from their teaching/leading in the classroom or school setting. They use a variety of different research methods such as action research and narrative research to collect and analyze data. They then share their research process with their colleagues to reflect on the process of self-study and the ways in which it has begun to impact their teaching and leading. Becoming teacher researchers enhances their teacher leadership. Mutually exclusive with EDFD 684.

**TLRN 686 Examining Teaching and Learning as Teacher Leaders (3 credits)**

Corequisite(s): TLRN 684. Restriction(s): Admitted to the Teacher Leadership Endorsement Program. This course brings together current ideas and literature in a critical exploration of the interrelationship between teaching, learning, and leadership. It provides teacher leaders with tools and resources to evaluate and develop their own views of the relationship between teaching and learning and the ways to document and assess student growth. Teacher leaders develop a working understanding of concepts such as learning, cognition, development, assessment, and pedagogy and examine how they occur in a variety of cultural contexts (home, school and community) and also within their own practices. In the course teachers analyze multiple examples that illustrate common interests and concerns with an emphasis on professional learning, research-based instructional practices, and the quality of reflective practice and self-study of teaching. Mutually exclusive with EDFD 686.

**TLRN 689 Teacher Leadership in Professional Development (3 credits)**

Corequisite(s): TLRN 692. This course brings together research and practice in a critical exploration of professional development and teacher learning. It provides teacher leaders with the tools and resources to be able to develop their own understanding of the role of communities of practice and professional development in teacher learning. Students study what research tells us about effective and ineffective professional development forms, focusing particularly on those that involve teacher leadership. We examine the role of technology and data analysis in teacher learning and how it is most effectively used in professional development. Students identify professional development needs in their school and then work to develop professional development plans and programs to meet those needs, incorporating technology and their understanding of effective professional development practices. Mutually exclusive with EDFD 689.

**TLRN 692 Teacher Leadership for Impact: People, Policy, and Practice (3 credits)**

Corequisite(s): TLRN 689. This course brings together theories and practices of education policy and law that have had an impact on teacher education, certification, and licensure. It provides teacher leaders with the habits of mind, skills, tools and resources to analyze and evaluate the effectiveness of education policy and law through the lens of teacher education. Teacher leaders study the history that has shaped the development of these education policies and laws on local, state, and federal levels, and will consider the impact of politics, the courts, and public opinion. They apply these understandings in order to critique policies derived from current federal legislation and explore their roles as advocates for teachers, students, and families. Mutually exclusive with EDFD 692.