TEACHING AND LEARNING (TLRN)

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 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 to analyze and evaluate their own practices 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. 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.