

# MASTER OF SCIENCE IN EDUCATION—TEACHER EDUCATION

Dr. Lauren Cummins, Graduate Program Coordinator  
2309 Beeghly College of Education  
(330) 941-7237  
lcummins@ysu.edu

## Introduction

The Master of Science in Education in Curriculum and Instruction provides advanced professional preparation for teachers. The Department of Teacher Education and Leadership Studies offers the Curriculum and Instruction master's program with the following specialization areas leading toward the Master of Science in Education degree.

Curriculum and Instruction specialization areas:

- Literacy
- Digital Teaching and Learning
- Teacher Leader
- other content area offered at YSU (contact the Department of Teacher Education for additional information). This option may lead to College Credit Plus eligibility

The Master of Science in Education in Curriculum and Instruction focuses on the development of professional practitioners committed to quality teaching. These professionals are committed to reflecting on, and applying knowledge, skills, and dispositions so that all students can learn. Central to the development of such professionals is the refinement of competencies in the areas of scholarship, teaching, leadership, communication, and interpersonal relations. Professional practitioners are committed to the belief that all children can learn.

For more information please contact the Teacher Education and Leadership Studies Office at (330)-941-3251.

## Mission

The Department of Teacher Education and Leadership Studies' mission is to empower teachers for professional practice. The mission commits the faculty to a theme of critical reflective practice where candidates are engaged in activities that build on their knowledge, skills, and dispositions related to effective teaching. Faculty members are committed to educating practicing professionals in the areas of: scholarship, teaching, leadership, management, communication, and interpersonal relations.

Accreditation

The Beeghly College of Education Graduate Degree Programs were accredited by the National Council for Accreditation of Teacher Education (NCATE). <http://www.ncate.org/>.

## Graduate Faculty

**M. Kathleen L. Cripe**, Ph.D., Professor, Chair  
STEM education; co-teaching

**Lauren Cummins**, Ed.D., Professor  
Literacy development; mentorship; developmentally appropriate practice; learning communities; professional dispositions; digital storytelling; distance education

**Marcia Matanin**, Ph.D., Professor

Assessment of student learning; program assessment; clinical partnerships

**Crystal L. Ratican**, Ph.D., Associate Professor  
Early childhood education; early childhood intervention specialists, literacy; teacher education

## Graduate Courses

### EMCE 5801 Early Childhood Generalist Science 2 s.h.

By exploring science teaching practices and technologies for grades 4-5, the candidates will review teaching methods of science, master the content stated in the Ohio Academic Learning Standards, find and design science programs and lessons, incorporate the national and state standards in teaching science, and strengthen the assessment methods for the science classroom instruction.

### EMCE 5802 Early Childhood Generalist Math 2 s.h.

By exploring math teaching practices and technologies for grades 4-5, the candidates will review instruction and assessment methods of mathematics, and master the content stated in the Ohio 2017 Learning Standards for Mathematics, and the Common Core Standards for Mathematics.

### EMCE 5803 Early Childhood Generalist Language Arts 2 s.h.

Candidates will learn language arts content and teaching methods, design integrated lessons, incorporate state and national standards, and utilize assessment methods for grades 4-5.

### EMCE 5804 Early Childhood Generalist the Arts, Health and Fitness 1 s.h.

Knowledge and application of the Arts, Health, and Fitness related to teaching practice for grades 4-5. Candidates will review content and methods of teaching the Arts, Health, and Fitness content as stated in the Ohio Academic Content Standards. Instruction on pedagogical strategies to include these content areas in the 4-5 curriculum.

### EMCE 5805 Early Childhood Generalist Social Studies 2 s.h.

Candidates will learn social studies content, teaching methods, design integrated lessons, incorporate state and national standards, and utilize assessment methods for grades 4-5.

### TCED 5888 Topical Seminar 1-3 s.h.

Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses.

**Prereq.:** Admission to upper-division status in COE or admission to the School of Graduate Studies.

### TCED 5888E Seminar edTPA Review 1-3 s.h.

Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses.

**Prereq.:** Admission to upper-division status in COE or admission to the School of Graduate Studies.

### TCED 5888N Topical Seminar Learning Abroad 1-3 s.h.

Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses. 1-3 s.h.

**Prereq.:** Admission to upper-division status in COE or admission to the School of Graduate Studies.

### TCED 5888P Topical Seminar Science Solar Cookers 1-3 s.h.

Examination of issues related to the teaching of early childhood education, middle childhood education, special education, multi-age education, family and consumer vocational education, or adolescent/young adult education not covered in depth of other courses.

**Prereq.:** Admission to upper-division status in COE or admission to the School of Graduate Studies.

**TCED 5991 Seminar in Teacher Education 1-5 s.h.**

Various topics of current value in teacher education as selected by faculty. Grading is S/U.

**Prereq.:** Admission to College of Graduate Studies.

**TCED 6905 Introduction to Digital Teaching and Learning 3 s.h.**

Digital teaching and learning is much more than knowing some great apps for the smart board or iPad. It is understanding a new paradigm that promotes a new pedagogy. It takes educators beyond the formal traditional classroom of lecture and paper/pencil into an interactive, student-centered environment. This course will introduce students to the paradigm of digital teaching and learning and provide the framework and foundation for change within districts and classrooms to meet 21st century learning.

**TCED 6906 Designing Curriculum for the 21st Century Learner 3 s.h.**

What does curriculum in the 21st century look like? How does the thinking paradigm differ from the traditional curriculum model? This course will build on the Introduction to Digital Teaching and Learning by introducing students to models of digital teaching that transform curriculum into the 21st century digital learning. Students will explore the process of unlearning traditional teaching methods and explore the shift to personalized, entrepreneur learning.

**Prereq.:** TCED 6905.

**TCED 6907 Literacy for Digital Teaching and Learning 3 s.h.**

Technology takes us out of a traditional form of literacy. Today, students are bombarded with tons of information and resources that effectively builds knowledge and skill for endless topics through the Internet. This course will explore the topic of digital literacy and support a knowledge-base that helps students in k-12 classrooms develop an ability to use digital technology to find information and critically evaluate that information's authority and relevance.

**TCED 6908 Digital Learning Environments 3 s.h.**

This course will provide students with learning experiences that explore what a classroom for digital learning looks and feels like. Students will be able to understand and be able to develop a variety of digital learning environments including; flipped class-times, blended learning environments, and online, distance education.

**TCED 6910 Leadership for the 21st-Century 3 s.h.**

This course will provide students with the knowledge and skills to provide leadership, developing the skills needed to become agents of change. The student will learn to lead and create classrooms, schools, and community organization where innovation, creativity, and technology is used to support learning environments that are engaging, supportive, and transformational.

**TCED 6911 Coding for Educators 3 s.h.**

Participants in this course will learn computational thinking, introductory computer programming, and technology integration for content courses. Participants will design three apps from start to finish, and leave the course with an instructional segment they can then implement into their curriculum.

**TCED 6912 Gaming for Educators 3 s.h.**

Participants in this course will develop instructional practices that rely on video games, and gaming techniques. Video games will be evaluated for inquiry skills, narrative potential, and content delivery. Video games are uniquely positioned to support student learning, as they serve multiple purposes and can be very engaging.

**TCED 6932 Action Research in Urban and Rural Education 3 s.h.**

This course focuses on action research as it applies to urban and rural education. Topics include reflecting to identify a problem, reviewing literature, planning and implementing interventions, data collection and analysis strategies, and sharing outcomes with others. Course may be offered onsite, online, or as a combination of both. Field experience in an appropriate educational setting is required.

**Prereq.:** Admission to School of Graduate Studies and Research.

**TCED 6933 Brain Based Teaching and Learning 3 s.h.**

This course is a critical appraisal of learning and teaching. Each learner constructs his/her brain as learning occurs. Teachers reconsider their practices in light of the science of learning research provided by education, neuroscience and socio-psychology. Course may be offered onsite, online, or as a combination of both.

**Prereq.:** Admission to School of Graduate Studies and Research.

**TCED 6936 Curriculum, Assessment, and Instruction to Improve Learning 3 s.h.**

Focus on the instructional design process from a practical perspective. Emphasis on planning the curriculum to include content analysis, learning objectives, instructional strategies, and measurement of student achievement.

**TCED 6940 Foundations of STEM Education Theory to Practice 3 s.h.**

Introduction to STEM education. Study of the history, foundation, and underlying principles of STEM education. Additional topics include: an inclusive mission engaging diversity in STEM education, STEM careers, and STEM as a part of the P-12 curriculum.

**TCED 6941 Engineering and Technology Inquiry 3 s.h.**

Introduction to principles of engineering and technology. Inquiry-based instruction using projects to solve engineering related problems with focus on implementation in the P-12 classroom.

**Prereq.:** TCED 6940.

**TCED 6942 Environmental Inquiry 3 s.h.**

The topics will include energy and material balances, ecosystems, sustainability, water quality regulations and standards, stream hydraulics, introduction to water supply and treatment and wastewater treatment and techniques of solid waste and hazardous waste management.

**Prereq.:** TCED 6940.

**TCED 6943 STEM Integration in the P-12 Classroom 3 s.h.**

Study of integration of STEM into the P-12 classroom through an innovative, integrated curriculum with multiple opportunities for P-12 students to engage in authentic, inquiry-based learning and design thinking.

**TCED 6944 A Global Perspective 3 s.h.**

Understanding of skills needed to compete in the global economy, and how STEM contributes to this. Focus on 21st century skills, persistence, inquiry, communication, creativity, and collaboration. P-12 STEM project development.

**TCED 6945 STEM Leadership 3 s.h.**

Focus on implementation of a STEM program to prepare students with STEM skills for college and career success. Physical environment, necessary resources, administrative and community buy-in and support. Grant writing for STEM education.

**TCED 6946 Supervision of Instruction 3 s.h.**

A course dealing with the supervision of classroom teachers and other personnel for those aspiring to be principals or supervisors. Classroom observation systems, professional development programs, accountability models, and common staff relationship problems are examined.

**TERG 6922 Organizing and Managing Diverse Literacy Environments 3 s.h.**

An examination of the physical and social contexts of diverse literacy environments that integrate foundational knowledge, cultural and linguistic backgrounds, use of research-based instructional practices, curriculum materials, and assessment-based decision-making.

**TERG 6923 Literacy and Phonics Instruction 3 s.h.**

An investigation of the philosophy, principles, and practices of reading (including phonemic and phonetic developments) and language arts instruction. An examination and application of formal and informal assessment procedures as well as an investigation of the language learning needs of diverse populations.

**TERG 6924 Content Literacy 3 s.h.**

An investigational of research-based philosophies, principles, and best practice for applying content-specific concepts, vocabulary, and engagements while using the language arts and study skills in ensure comprehending.

**TERG 6926 Reading and Language Arts Assessment 3 s.h.**

An examination and application of formal and informal assessment procedures in reading and language arts including the use of background information and discrete data. Data analysis, interpretation, and translations to instruction are applied.

**TERG 6927 Practicum: Coaching for Effective Literacy Instruction 3 s.h.**

An application of literacy coach practices in assessment-based decision-making, research-based instruction, and preparation and delivery of high-quality professional development using techniques for working with individual teachers in a coaching context and groups of teachers in whole-group PD settings.

**TERG 6928 Practicum: Case Study in Reading and Language Arts 3 s.h.**

Application of previous course content involving supervised formal and informal assessment of school-age pupils, developing an individualized reading plan, selecting appropriate instructional practices and materials, maintaining tutoring logs, developing a student portfolio, evaluating results of instruction, and writing a case study report.

**Prereq.:** TERG 6926.