21ST CENTURY TEACHING AND LEARNING

21st Century Teaching and Learning
Mrs. Anne Butler, Program Coordinator

The Master of Science in Education with a major in 21st Century Teaching & Learning is a fully online program offered in partnership with the National Institute for Professional Practice Graduate Education. This 30-credit program is designed to support secondary educators in Science, Mathematics, Language Arts, and Social Studies. Throughout this program, teachers will be provided with the tools and strategies that can be immediately applied in the classroom to create an engaging 21st Century Classroom. Unlike traditional master's degrees, teachers in this program will complete a series of courses designed specifically for their discipline with a supportive study group of fellow educators.

Applicants to this program must complete the admission process as outlined earlier in this section, and also be employed at the 6-12 level in an educational institution.

Program Learning Outcomes:

1. The student will describe the role collegial collaboration plays in establishing a 21st century classroom
2. The student will utilize technology in authentic instruction to promote higher level thinking skills in students
3. The student will apply the principles of project-based learning to lesson development to increase student achievement
4. The student will identify the needs and preferences of 21st century learners
5. The student will conduct action research to identify instructional implications for implementing authentic instruction and assessment in the 21st century classroom
6. The student will conduct action research to identify instructional implications for implementing inquiry-based learning in the 21st century classroom
7. The student will apply the principles of differentiated instruction to lesson development to increase student achievement

The program consists of the following courses (30 credits):

- EDAM 5030: Teaching in the 21st Century: The Need for Change (3 Credits)
- EDAM 5031: Action Research for Educational Change (3 Credits)
- EDAM 5032: Educational Assessment to Guide Instruction (3 Credits)
- EDAM 5033: Developing Reading and Writing Across the Curriculum (3 Credits)
- EDAM 5034: Applying Advanced Technology to Support Standards-Based Instruction (3 Credits)
- EDAM 5035A/B/C/D: Teaching Authentic Content in Math/Science/Social Studies/Language Arts (3 Credits)
- EDAM 5036A/B/C/D: Differentiated Instruction in the Classroom (Math/Science/Social Studies/Language Arts) (3 Credits)
- EDAM 5037A/B/C/D: Inquiry-based Learning in the Classroom (Math/Science/Social Studies/Language Arts) (3 Credits)
- EDAM 5038A/B/C/D: Project-based Learning in the Classroom (Math/Science/Social Studies/Language Arts) (3 Credits)
- EDAM 5039: Applying 21st Century Teaching to Educational Practice (3 Credits)

Please refer to the course description section of this bulletin for information on course prerequisite requirements.

There are no transfer credits permitted in this program.

EDAM. EDAM

EDAM-5001. EARLY LITERACY: GUIDING PRINCIPLES AND LANGUAGE DEVELOPMENT
Credits: 3
This course is the prerequisite for all other courses in the Early Childhood Literacy program. It outlines the philosophical base for the program as well as key understandings central to young children’s early literacy development. Course topics will include guiding principles for developing children’s early literacy skills, language development stages, theories of language acquisition, linguistic diversity, language assessment, communicative disorders, and school-home connection.

EDAM-5002. WORD STUDY
Credits: 3
This course examines the instructional building blocks of successful reading skills. Educators will explore developmentally appropriate instructional and assessment methods for teaching children how to recognize word patterns so they can become accurate readers.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5003. FLUENCY AND VOCABULARY DEVELOPMENT
Credits: 3
This course presents effective, developmentally appropriate methods for building students’ oral reading fluency and vocabulary skills to improve overall comprehension.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5004. DEVELOPING COMPREHENSION, PART I
Credits: 3
This course presents an introduction to comprehension instruction as a key component of effective reading instruction. The course focuses on helping students apply their understanding of structure and elements of text and genres to create meaning as they are reading. Educators will integrate developmentally appropriate practices to adapt instruction that meets the diverse needs of learners.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5005. DEVELOPING COMPREHENSION, PART II
Credits: 3
This course explores the development and assessment of students’ coordinated use of comprehension strategies to make sense of text. Educators will learn how to effectively model developmentally appropriate comprehension text strategies for students.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development, EDAM-5004 Developing Comprehension Part I
EDAM-5006. DEVELOPING COMPREHENSION, PART II
(2-3)
Credits: 3
The course begins with a review of the core beliefs about teaching and learning, the Guiding Principles, and the Gradual Release of Responsibility Model. The learner will review what comprehension is and why it should be studied. This will be followed by modeling of comprehension strategies used individually. The learner will also examine tools to support comprehension instruction strategies. Next, the learner will examine techniques known as interactive read alouds/think alouds and shared reading and see modeling of comprehension strategies used with these techniques. Finally, the course will show how comprehension can be assessed.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development, EDAM-5004 Developing Comprehension Part I

EDAM-5007. DIFFERENTIATED SMALL GROUP INSTRUCTION
Credits: 3
This course focuses on implementing developmentally appropriate differentiated small group instruction to meet the needs of all learners. Course topics include components of differentiated instruction and using assessment data to group students.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5008. DIFFERENTIATED SMALL GROUP INSTRUCTION (2-3)
Credits: 3
The course begins with a review of the core beliefs about teaching and learning, the Guiding Principles and the Gradual Release of Responsibility Model. The course covers what differentiated small group instruction is, why it is used, and how the Guiding Principles apply to it. This will be followed by considering the developmental stages of learning to read and the teaching emphasis at each stage. The course will then cover how to use assessment data to group and regroup students for differentiated instruction. Then, the learner will consider differentiated systematic and explicit instruction and learn what the lesson components are, how to plan the lesson, and how to manage the classroom. Finally, the course will cover how to create a partnership with parents and how to communicate with them.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5009. DEVELOPING INDEPENDENT READERS
Credits: 3
This course examines methods for fostering and managing independent reading in a developmentally appropriate way, and explores research-based school/home/community partnerships.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5010. CONNECTING READING AND WRITING
Credits: 3
This course explores the reciprocal processes of reading and writing as well as the strategies for helping students become strategic writers who are able to write to learn and write to demonstrate learning. Course topics include the writing process, strategies and assessments, genres of writing, writing across the curriculum, and developmentally appropriate instructional procedures.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5011. CONNECTING READING AND WRITING (2-3)
Credits: 3
In this course, learners will understand how the reciprocal processes of connecting reading and writing accelerate student learning in both areas. This course will provide the research, the continuum of development, and resources for instructional techniques, assessment and record keeping. The learner will apply learned concepts and focus on student achievement.

Pre-Requisites
EDAM-5001 Early Literacy Guiding Principles and Language Development

EDAM-5012. DEVELOPING A RESULTS-DRIVEN EARLY LITERACY CLASSROOM
Credits: 6

Pre-Requisites
EDAM-5001, EDAM-5002, EDAM-5003, EDAM-5004, EDAM-5005, EDAM-5007, EDAM-5009, EDAM-5010, EDAM-5013

EDAM-5013. TEACHER LEADERSHIP
Credits: 3
Teacher leaders are agents of change. This course guides educators in facilitating change at their schools by exploring school culture and experiencing the power of reflective practice.

Pre-Requisites
None

EDAM-5020. INSTRUCTIONAL COACHING I
Credits: 3
Instructional Coaching I defines instructional coaching and provides depth on initial coaching strategies used by new coaches as they develop their role within a school.

Pre-Requisites
EDAM-5013 Teacher Leadership

EDAM-5021. INSTRUCTIONAL COACHING II
Credits: 3
Instructional Coaching II provides additional coaching strategies used after the role has been established and provides depth on evaluating program success using student assessment results.

Pre-Requisites
EDAM-5020 Instructional Coaching I
EDAM-5022. PROBLEM-BASED APPROACH TO INSTRUCTIONAL COACHING
Credits: 3
This is a comprehensive instructional coaching course designed to address a range of grade levels and content areas. It provides examples through a case study approach of dealing with content areas and grade levels that span K-12 and are unique to specific certification areas and the teaching dilemmas and situations that are encountered when coaching K-12 teachers. Issues arising with special education, racial and socio-economic diversity are also addressed.

Pre-Requisites
EDAM-5013 Teacher Leadership

EDAM-5023. PROBLEM-BASED APPROACH TO K-3 LITERACY COACHING
Credits: 3
This course is specific to the intended content area. It provides specific examples through case study approach of dealing with both the content area and grade range unique to the intended certification and the teaching dilemmas and situations that are encountered when coaching teachers. Issues arising with special education, racial and socio-economic diversity are also addressed.

Pre-Requisites
EDAM-5013 Teacher Leadership

EDAM-5030. TEACHING IN THE 21ST CENTURY
Credits: 3
This course lays the foundation by answering the question, "Why do I need to change my instruction?" Through this course, many learners will understand that student disinterest and poor achievement can be linked to the use of 20th century teaching strategies being used on 21st century minds. This course will allow learners to reflect on their current instruction in light of what 21st century students need. It will provide a systems view of what needs to change in the classroom and in the school system. The online learner will assess these needs and be introduced to the pedagogical strategies used, including inquiry, project-based learning, and differentiated instruction. Prerequisite course to all other courses in the MS in 21st Century Teaching & Learning.

Pre-Requisites
EDAM-5013 Teacher Leadership

EDAM-5031. ACTION RESEARCH FOR EDUCATIONAL CHANGE
Credits: 3
Action research is applied research educators can do within the school to improve practice, from instruction to learning. Knowledge and skill will be in designing action research, using both quantitative and qualitative data collection methods, to inform and improve practice.

Pre-Requisites
EDAM-5030 Teaching in the 21st Century

EDAM-5032. USING ASSESSMENT TO GUIDE INSTRUCTION
Credits: 3
Using data-driven instruction to guide teaching and learning is critical in the attainment of student learning outcomes. Educators will learn to use assessments to plan, modify, and differentiate instruction, as well as to assess mastery of content and academic standards through the selection of appropriate content and the design of varied assessments to lead to the interpretation and application of data from multiple assessment sources. (cross-listed with ED-520).

Pre-Requisites
EDAM-5030 Teaching in the 21st Century

EDAM-5033. DEVELOPING READING & WRITING ACROSS THE CURRICULUM
Credits: 3
The attainment of higher levels of literacy in adolescent learners requires the development of literacy skills across all curricular areas. This course will enable educators to develop and refine secondary students' skills in reading and writing, as well as speaking and listening through the design of integrative experiences in content area instruction that are both student-centered and performance-based.

Pre-Requisites
EDAM-5030 Teaching in the 21st Century

EDAM-5034. APPLYING ADVANCED TECHNOLOGY TO SUPPORT STANDARDS-BASED INSTRUCTION
Credits: 3
This course introduces students to advanced instructional technologies, currently available to educators, and the ways they can be used to support standards-based instruction. Ubiquitous use of technology will be emphasized to create enriched, motivating and authentic learning experiences for students.

Pre-Requisites
EDAM-5030 Teaching in the 21st Century

EDAM-5035. TEACHING AUTHENTIC CONTENT IN THE 21ST CENTURY
Credits: 3
This course shows teachers of specific subject areas how to provide an authentic experience or their students by using the previously learned methods to transform their teaching into having students engage in learning and activities as people actually would in the real world.

Pre-Requisites
EDAM-5030 Teaching in the 21st Century

EDAM-5036. DIFFERENTIATED INSTRUCTION TO MEET THE NEEDS OF ALL LEARNERS
Credits: 3
This course will explain how learners can determine the needs and learning styles of their students in order to differentiate instruction so that the needs and learning styles of students are met.

Pre-Requisites
EDAM-5030 Teaching in the 21st Century
EDAM-5037. INQUIRY-BASED LEARNING IN THE 21ST CENTURY  
Credits: 3  
This course explains that inquiry-based learning helps students learn how to learn through observation, reason, critical thinking, and the ability to justify or question knowledge. This course also allows learners to understand that inquiry-based learning helps students learn more by asking questions and doing investigations in order to learn, with the teacher acting more as a consultant.

Pre-Requisites  
EDAM-5030 Teaching in the 21st Century

EDAM-5038. PROJECT-BASED LEARNING IN THE 21ST CENTURY  
Credits: 3  
This course will explain how project-based learning addresses learning though completing projects that foster skills in communication, collaboration, networking research using technology, and critical thinking.

Pre-Requisites  
EDAM-5030 Teaching in the 21st Century

EDAM-5039. APPLYING 21ST CENTURY TEACHING TO EDUCATIONAL PRACTICE  
Credits: 3  
This capstone course requires secondary educators to transfer the knowledge and skills attained in this program to practice through authentic teaching and learning experiences. Projects that demonstrate the mastery of program goals and objectives will be planned, implemented, and reflected upon in a cumulative experience that enables educators to demonstrate their mastery of 21st century pedagogy.

Pre-Requisites  
EDAM-5030, EDAM-5031, EDAM-5032, EDAM-5033, EDAM-5034, EDAM-5035, EDAM-5036, EDAM-5037, EDAM-5038

EDAM-5040. FOUNDATIONS OF THE ART AND SCIENCE OF TEACHING  
Credits: 3  
This course introduces learners to the work of Dr. Robert Marzano and his meta-analysis of the research regarding effective teaching practices conducted over the last 35 years in the field of education. Throughout this course learners will review research on effective teaching, develop a framework for designing units, and be introduced to a research based observation and feedback protocol. This course will also lay the foundation for the core courses in this degree program by presenting learners with Dr. Marzano’s 10 instructional design questions.

Pre-Requisites  
None

EDAM-5041. ESTABLISHING LEARNING GOALS TO SUPPORT LEARNING & INSTRUCTIONAL DESIGN  
Credits: 3  
This course provides an in-depth exploration to the importance of learning goals that address various levels of cognitive processing. Learners in this course will develop learning goals to address high levels of learning for the students in their classroom. Additionally learners will facilitate the development of learning goals with their students.

Pre-Requisites  
EDAM-5040 Foundations of the Art & Science of Teaching

EDAM-5042. MONITORING & MEASURING STUDENT PROGRESS  
Credits: 3  
This course defines standards-based systems and standards-referenced systems. Learners in this course will differentiate between the two systems and develop a system for tracking student progress towards learning. Learners in this course will also use summative and formative assessments that will allow them to report student progress and measure student achievement.

Pre-Requisites  
EDAM-5040 Foundations of the Art & Science of Teaching and EDAM-5041 Establishing Learning Goals to Support Learning & Instructional Design

EDAM-5043. ACTIVELY PROCESSING NEW CONTENT  
Credits: 3  
This course focuses on developing a comprehensive approach to introducing new content, which will provide learners with the tools to support student construction of meaning through active interaction with content. Learners in this course will acquire the skills needed to introduce new knowledge through critical input experiences using active processing strategies that will allow students in their classroom to achieve their learning goals.

Pre-Requisites  
EDAM-5040 Foundations of the Art & Science of Teaching

EDAM-5044. Extending Student Learning  
Credits: 3  
In this course learners will gain the knowledge and skills needed to provide their students with opportunities to generate and test hypotheses by applying new information with relevant content. Learners in this course will engage in activities that apply evidence-based methods in the classroom for long-term retention of knowledge and use of content to move beyond levels of knowing.

Pre-Requisites  
EDAM-5040 Foundations of the Art & Science of Teaching

EDAM-5045. Designing Instruction for Student Engagement  
Credits: 3  
This course examines research findings around theory and practice on student engagement. Learners in this course will be provided with methods to motivate and engage students in ways that enhance academic student performance.

Pre-Requisites  
EDAM-5040 Foundations of the Art & Science of Teaching

EDAM-5046. Creating an Effective Classroom Environment  
Credits: 3  
This course encourages learners to re-examine their current routines and procedures, how they are developed, maintained, and adjusted in order to support a positive classroom climate. Learners will focus on creating the conditions for effective relationships with their students through cooperation, concern, and empathy for students as well as appropriate levels of objectivity, guidance, and control.

Pre-Requisites  
EDAM-5040 Foundations of the Art & Science of Teaching
EDAM-5047. DEVELOPING RELATIONSHIPS AND HIGH EXPECTATIONS FOR STUDENT LEARNING
Credits: 3
The teacher-student relationship provides foundational support for effective instruction. This course enables learners to examine the often hidden dynamic of personal beliefs and expectations and their impact on student achievement.

Pre-Requisites
EDAM-5040 Foundations of the Art & Science of Teaching

EDAM-5048. APPLYING THE ART AND SCIENCE OF TEACHING
Credits: 6
This six credit course engages learners in a formal action research project to determine the impact on student learning or specific instructional, curricular, and management strategies used in the classroom. Learners will reflect upon the knowledge acquired throughout the previous courses in the degree program to develop their practicum where they will apply theory and practice directly into their classroom.

Pre-Requisites
EDAM-5040 Foundations of the Art & Science of Teaching; EDAM-5041 Establishing Learning Goals to Support Learning & Instructional Design; EDAM-5042 Monitoring & Measuring Student Progress; EDAM-5043 Actively Processing New Content; EDAM-5044 Extending Student Learning; EDAM-5045 Designing Instruction for Student Engagement; EDAM-5046 Creating an Effective Classroom Environment; EDAM-5047 Developing Relationships and High Expectations for Student Learning

EDAM-5049. CONTENT LITERACY
Credits: 3
The purpose of this course is to introduce research that supports the teaching of literacy across content areas. In addition, the course provides students the opportunity to engage in content literacy strategies, with emphases on comprehension, vocabulary development, and writing.

EDAM-5060. FOUNDATIONS OF LITERACY AND LANGUAGE ACQUISITION
Credits: 3
This course introduces the foundations of language and literacy acquisition focusing on the components of a comprehensive literacy program, early reading skills, and classroom environment. The learner will explore historical perspectives in reading instruction, the importance of developing early reading skills, and best practices for developing a classroom environment that fosters early literacy development. Prerequisite for Reading Specialist program.

EDAM-5061. ASSESSING LITERACY
Credits: 3
This course begins with an introduction to the basic elements of assessing literacy. Learners will explore several areas of assessment related to core competencies in literacy including emergent literacy, oral reading and fluency, comprehension and strategic knowledge, and determining affective factors. Throughout the course, learners will engage in hands-on activities enabling them to practice planning, administering, scoring, and interpreting a variety of literacy assessments. For the culminating activity, learners will select a student who has been struggling with reading using course assessment results to support their selection and develop a reading profile for this student.

EDAM-5062. VOCABULARY AND COMPREHENSION DEVELOPMENT
Credits: 3
This course focuses on using research-based strategies to develop vocabulary and comprehension. Learners will be introduced to the vocabulary-comprehension connection and how recognizing genre and literary and informational elements of text improves comprehension. During this course, the learner will practice selecting, implementing, and evaluating appropriate strategies for use with text comprehension instruction.

EDAM-5063. DEVELOPING READING THROUGH WRITING
Credits: 3
This course focuses on using research-based strategies to develop vocabulary and comprehension. Learners will be introduced to the vocabulary-comprehension connection and how recognizing genre and literary and informational elements of text improves comprehension. During this course, the learner will practice selecting, implementing, and evaluating appropriate strategies for use with text comprehension instruction.

EDAM-5064. INSTRUCTIONAL STRATEGIES TO SUPPORT INDEPENDENT READERS
Credits: 3
In this course, teachers will develop an understanding of instructional practices for supporting their students as independent readers. Learners will practice applying knowledge in the following areas: Guided Reading, Matching Texts with Readers, Independent Reading, and Literature Study. During the culminating activity, learners will synthesize their learning by developing a comprehensive weekly schedule incorporating the key components of a reading block.

EDAM-5065. LITERACY LEADERSHIP AND COACHING
Credits: 3
In this course learners will explore the three areas of expertise required of all 21st century reading specialists: instruction, leadership, and assessment. Learners will study and practice leadership principles related to conducting meetings, providing professional development, and literacy coaching. In addition, learners will investigate the responsibilities of the reading specialist in writing proposals, developing external partnerships, and becoming an agent of change for the school’s literacy program.

EDAM-5066. ACCOMMODATIONS AND ADAPTATIONS IN LITERACY FOR DIVERSE LEARNERS
Credits: 3
In this course students will learn the dimensions of literacy and the analytic process to prepare for differentiation of instruction so that all children can access literacy instruction. The student will learn a problem-solving model guided by inquiry and resulting in learning activities that will address a child’s specific literacy needs. Teachers will expand their repertoire for supporting students as literacy learners. They will learn to gather and interpret relevant information to differentiate instruction for diverse learners. These techniques will help teachers to provide instruction to a wide range of talents and abilities in the classrooms of today.

EDAM-5067. READING SPECIALIST INTERNSHIP
Credits: 6
This culminating experience prepares students for the role of reading specialist while working in an instructional setting under the supervision of a licensed reading specialist. Interns will implement reading programs, plan interventions, and apply a range of reading assessments and instructional strategies in the diagnosis and remediation of reading problems. Interns will demonstrate the ability to manage the instructional environment and effectively communicate to promote the development of literacy.
EDAM-5068. EMERGENT LITERACY
Credits: 3
This course provides an in-depth examination of reading development from birth to kindergarten as well as child development as it relates to emergent literacy. This course is based on the combination of the scientifically based reading research approach to literacy instruction as well as the emergent literacy perspective, which creates a “value-added” or blended approach to language and literacy teaching and learning. Research literature will be reviewed as it pertains to children’s literacy development and best practice instructional methodologies. Students will develop instruction based on the foundation of reading that includes oral language, phonemic and phonological awareness, as well as alphabet knowledge, vocabulary and comprehension.

EDAM-5069. DIAGNOSTIC ASSESSMENT & INTERVENTION IN LITERACY
Credits: 3
This course is designed to advance the knowledge of the participants to refine and expand the diagnostic and assessment process in determining reading difficulties and interventions. Research based strategies for the assessment and instruction of diverse learners will be examined.