Master in the Art of Teaching
Online Master's Degree programs
Course Descriptions

- Curriculum, Instruction & Assessment, K–12
- Reading & Literacy, K–6
- Elementary Mathematics, K–5
- Middle Level Mathematics, 6–8

The Master in the Art of Teaching (MAT) degree provides teachers with the opportunity to link the latest developments in educational research to their own teaching practice. The program is designed to empower teachers by focusing on the knowledge and skills required to deliver effective instruction to diverse learners from preschool through high school, including those with special needs.

The structure of the MAT program allows working professionals to obtain their master's degree in less than two years.

Master in the Art of Teaching

Marygrove College has been known for excellence in teaching since 1927 and was one of the first U.S. colleges to offer the convenience and flexibility of obtaining a master's degree via distance learning. With over 28,000 graduates from the Master in the Art of Teaching (MAT) degree program since 1990, Marygrove has a history of serving K–12 teachers with a program that is relevant to today's working educator, with outcomes that improve classroom practice and help graduates fulfill their career aspirations.

The MAT is available as the following programs of study with a focus on:

- Curriculum, Instruction & Assessment, K–12
- Reading & Literacy, K–6
- Elementary Mathematics, K–5
- Middle Level Mathematics, 6–8

Each of the MAT degrees consists of 10 courses—made up of core courses and specialty courses. Six core courses focus on content that all teachers need to know regardless of grade level and/or subject area and four specialty courses that focus on the content specific to each program. Descriptions for each of the courses are listed on the following pages.

MAT PROGRAMS AT A GLANCE

6 CORE MAT COURSES:	■ Teacher as Leader ■ Understanding Teaching and Learning ■ Instructional Design ■ Effective Assessment ■ Teacher as Researcher ■ Meeting the Needs of All Students
COURSES BY SPECIALTY: **Curriculum, Instruction & Assessment, K-12**	■ Research-Based Instructional Strategies ■ Self-Directed Learning & Student Engagement ■ Classroom Management for Today's Teacher ■ Motivational and Inspirational Teaching
Reading & Literacy, K-6	■ Foundations of Reading and Literacy ■ Assessment & Intervention for Struggling Readers ■ Reading in the Content Areas ■ The Reading and Writing Connection
Elementary Mathematics, K-5	■ Problem Solving and Number & Operations, K-5 ■ Measurement and Geometry, K-5 ■ Algebra, K-5 ■ Data Analysis and Probability, K-5
Middle Level Mathematics, 6-8	■ Problem Solving and Number & Operations, 6-8 ■ Measurement and Geometry, 6-8 ■ Algebra, 6-8 ■ Data Analysis and Probability, 6-8

Further questions? Call toll-free 1-877-984-7277 or email masters@teachscape.com

6 CORE COURSES

EDU 568 Teacher as Leader

As the first course in the MAT program, *Teacher as Leader* establishes foundational knowledge and introduces participants to current research related to teacher leadership. A growing body of evidence seems to show that teacher leaders can initiate positive school reform and actually sustain it. This course focuses on these teacher leaders and examines the specific characteristics of successful teachers. Participants become reflective practitioners as they study the current state of education and many of the leading reform efforts. They learn leadership strategies, and then apply them in their classrooms, schools, and communities. Participants set personal goals outlining ways they can strengthen their commitment to student learning and achievement.

Course Outcomes

Participants will be able to:

- Articulate a personal vision and philosophy of teacher leadership
- Utilize skills for self-assessment as effective practitioners of pedagogical, curricular, and technological expertise through reflective practice
- Collaborate productively and positively within a professional learning community to be more effective practitioners
- Use their communication skills to build a positive climate in schools and a sense of community

EDU 569 Understanding Teaching and Learning

This course focuses on the intricacies of how people learn. It establishes a firm foundation necessary for instructional leaders to make intelligent decisions about the types of teaching strategies and instructional plans they utilize in their classrooms. The course covers recent research related to theories of learning and cognition. Participants are asked to apply these theories in their classrooms so that they will use their knowledge of learning theory to strengthen their instructional practices and commitment to student learning and achievement.

Course Outcomes

Participants will be able to:

- Learn to make intelligent decisions about effective teaching strategies
- Develop a critical perspective on learning and cognition regarding educational equity for all students in matters of gender, ethnicity, and culture
- Apply learning theory to instructional practices
- Strengthen their commitment to student learning and achievement

National Experts and Program Contributors Include:

Dr. Isabel Beck, *University of Pittsburg*
Dr. Diane Briars, *Pittsburgh Public Sch.*
Dr. Marvin Cohen, *Bank Street College*
Dr. Ceri Dean, *McREL*
Dr. Jane Doty, *McREL*
Dr. Nell Duke, *MI State Univ.*
Dr. Paul Eggen, *Univ. of FL*
Dr. Susan B. Empson, *Univ. of TX*
Dr. Connie Juel, *Harvard Univ.*
Dr. James Kaput, *Univ. of MA*
Dr. Donald Kauchak, *Univ. of UT*
Dr. Ann Lieberman, *Stanford Univ.*
Dr. Robert Marzano, *McREL*
Dr. Jay McTighe, *Consultant, author*
Dr. Louisa Cook Moats, *Researcher*
Dr. Jeanne Ormrod, *Researcher/ consultant/author*
Dr. Michael Pressley, *MI State Univ.*
Dr. Timothy Rasinski, *Kent State Univ.*
Dr. Judah Schwartz, *Harvard Univ.*
Dr. Deborah Stipek, *Stanford Univ.*
Dr. Dorothy Strickland, *Rutgers Univ.*
Dr. Carol Ann Tomlinson, *Univ. of VA*
Dr. Joseph A. Torgeson, *FL State Univ.*
Dr. Grant Wiggins, *President, Authentic Education*

EDU 570 **Instructional Design**

This course establishes a comprehensive way for teachers to engage in unit planning and instructional design. Based on the intensive backwards-design model (Understanding by Design) of Wiggins & McTighe, teachers learn to "create" curriculum rather than "cover" it. Participants integrate assessment into their planning and create a sequence of learning experiences that logically and meaningfully help students meet required learning goals. In addition, participants learn how to align their instructional design to state and local standards.

Course Outcomes

Participants will be able to:

- Examine the three stages of the Understanding by Design (UbD) model
- Compare and contrast the UbD framework with the one they are currently using
- Support the meaningful context of a lesson by identifying the "essential questions" students will focus on
- Complete a unit plan that incorporates all three stages of the UbD framework

EDU 618 **Effective Assessment**

Because today's educational climate demands attention to national, state, and district standards, high-stakes testing is part of the educational landscape that all teachers must learn to navigate. This course grounds teachers in effective ways to assess their students, and how to use this information to modify their instructional practices. Beginning with understanding the many types of assessment methods, participants examine the specific purposes of each and how best to use different assessments in their classrooms. Participants learn how to design effective assessments to meet the particular needs of their students and teaching situations. Techniques to involve students in their own assessment are also included.

Course Outcomes

Participants will be able to:

- Identify and define different assessment methods according to three categories: Assessment of Learning, Assessment for Learning, and Assessment as Learning
- Examine different grading systems and apply one that best communicates student progress and achievement to others
- Analyze multiple sources of data to identify patterns in student learning and knowledge
- Draw conclusions, and change or modify teaching practices, based upon assessment data

EDU 501 Teacher as Researcher

This course provides the opportunity for teachers to: reflect on and assess their teaching; explore and test new ideas, methods, and materials; assess the effectiveness of the new approaches; share feedback with others; and make decisions about which new approaches to include in their classroom practices. Participants complete an individual research project aimed at a particular problem specific to their classroom situation that addresses student achievement. Next, participants engage in action research, data analysis, and creation and implementation of a plan of intervention based upon their research findings.

Course Outcomes

Participants will be able to:

- Examine the theoretical foundations of action research and develop an action research plan
- Compare and contrast qualitative and quantitative data collection techniques
- Analyze and interpret data according to proven processes
- Share and critique action research projects

EDU 622 Meeting the Needs of All Students

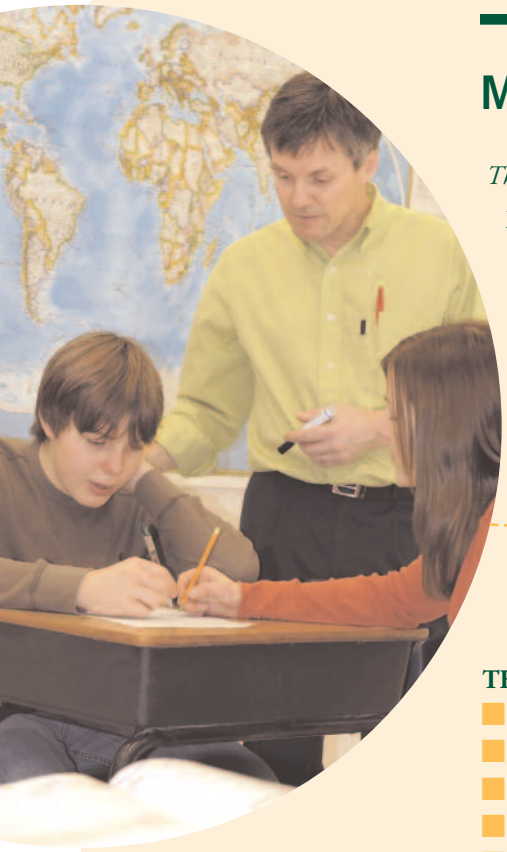
This course provides teachers with proven strategies to help them reach all of their students regardless of ability, language development, race, socioeconomic status, gender, and/or learning challenges. Practical and ethical techniques to meet the needs of special student populations are included. Participants learn how to apply strategies to increase student engagement, address students' individual learning styles, and verify the effectiveness of the strategies used. Strategies for strengthening partnerships with parents to facilitate academic achievement of students are also explored and implemented.

Course Outcomes

Participants will be able to:

- Explain and demonstrate what it means to teach responsively
- Deepen understanding of student variance, and apply strategies to support cognitive impairments, difficulties attending to task, learning disabilities, English language learners, above-average abilities, and students who are at risk of failure
- Identify, examine, and apply the nine attitudes and skills of teaching that help all learners
- Employ classroom management techniques that allow for flexible instruction and support responsive teaching

designed to empower teachers



MAT: CURRICULUM, INSTRUCTION & ASSESSMENT, K–12

The Master in the Art of Teaching with a Focus on Curriculum, Instruction & Assessment is a degree program that provides classroom teachers access to research-based strategies that will empower them to become teacher leaders. By the end of this program, participants will embody commitment to their students, their colleagues, and their school communities.

Additionally, the program as a whole incorporates the 5 Core Principles of Teaching as described by the National Board of Professional Teaching Standards (NBPTS). It is an expectation that upon completion of this degree, teachers actively apply these principles:

1. Teachers are committed to students and learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities.

THE 6 CORE COURSES:

- EDU 568 **Teacher as Leader**
- EDU 569 **Understanding Teaching and Learning**
- EDU 570 **Instructional Design**
- EDU 618 **Effective Assessment**
- EDU 501 **Teacher as Researcher**
- EDU 622 **Meeting the Needs of All Students**

plus 4 SPECIALTY COURSES:

EDU 605 Research-Based Instructional Strategies

Research-Based Instructional Strategies supports the pursuit of developing true teacher leaders by focusing on research-based teaching strategies that result in improved student achievement.

This course is based upon a body of research by Robert Marzano and colleagues at Mid-continent Research for Education and Learning (McREL) that identified specific instructional practices that improve student achievement. Participants will explore the results and classroom implications of this research by analyzing the instructional practices in real classrooms, and customize the use of the strategies to their own teaching situations.

Course Outcomes:

Participants will be able to:

- Examine the latest research and practical application of instructional strategies to enhance student learning
- Apply clear guidelines for identifying how and when to use these high-impact strategies—tailored to grade level and content area(s)—to fully leverage student learning
- Develop a long-term plan for continued improvement in using these strategies effectively

deliver effective instruction to diverse learners

EDU 610 **Self-Directed Learning & Student Engagement**

Self-Directed Learning and Student Engagement digs deeper into concepts and theories introduced in prior courses. Now that the participants have common understanding of backward design (Wiggins & McTighe, 2006), effective assessment, and how to meet the needs of all students, they are ready to hone in on ways to motivate their students to be more self-directed in their learning.

This course focuses on helping students develop the skills necessary to thrive in and out of the classroom. Participants learn strategies for helping their students develop flexible knowledge, as well as problem-solving, cooperative learning, and self-motivation skills. Special attention is given to ways to engage all students in opportunities to examine and evaluate their own work and learn from the work of their peers.

Course Outcomes:

Participants will be able to:

- Examine the latest research on student motivation and the classroom implications of this research
- Implement instructional strategies that enable students to be more self-directed
- Plan and incorporate consistent peer tutoring
- Develop tools to involve students in evaluating their work

EDU 615 **Classroom Management for Today's Teacher**

Classroom Management for Today's Teacher focuses on ways teachers can efficiently and judiciously manage their classroom so that a positive and supportive learning environment is created and maintained. This course introduces strategies that enable teachers to fine-tune their classroom practices while maintaining high expectations for all students. Participants develop instructional routines, apply effective behavior management techniques, and employ conflict resolution strategies.

Course Outcomes:

Participants will be able to:

- Develop instructional routines that provide structure and a supportive learning environment
- Apply effective behavior management techniques that support classroom interactions and learning
- Implement conflict resolution strategies

EDU 620 **Motivational and Inspirational Teaching**

The final course of the program, *Motivational and Inspirational Teaching*, is a culmination of many strands covered throughout the program. This course strikes a balance between the macro and micro concepts of instructional planning. Here, teachers take a "big picture" view of their responsibilities, looking for tangible ways to make connections that may have gone unnoticed prior to their experiences in this MAT program. They will have the opportunity to demonstrate how they are no longer just surviving as teachers but thriving as teacher leaders.

This course examines case studies of truly inspirational teachers who have transformed the lives of their students. Through the use of biographies, narratives, profiles, and interviews with top educators and scholars, participants examine and reflect on the problems and satisfactions of teaching.

Course Outcomes:

Participants will be able to:

- Examine the tangible effects inspirational teachers have had on students
- Compare and contrast the characteristics of inspirational teachers
- Complete a self-evaluation of experience in the program and personal growth as a teacher leader
- Develop a plan for ongoing professional and personal development

MAT: READING & LITERACY, K–6

The Master in the Art of Teaching (MAT) with a Focus on Reading & Literacy is a program of study that accomplishes two goals. First, it concentrates on developing instructional leaders. Second, it concentrates on the content knowledge elementary teachers need in order to be effective teachers of reading and literacy.

The program incorporates the Five Core Propositions (principles of teaching) as described by the National Board for Professional Teaching Standards (NBPTS). It is an expectation that upon completion of this degree, teachers actively apply these principles:

- Teachers are committed to students and learning.
- Teachers know the subjects they teach and how to teach those subjects to students.
- Teachers are responsible for managing and monitoring student learning.
- Teachers think systematically about their practice and learn from experience.
- Teachers are members of learning communities.
- The program also incorporates the International Reading Association (IRA) Standards for Reading Professionals. These standards emphasize content knowledge and professional practice that is evidence of this knowledge.

THE 6 CORE COURSES:

- EDU 568 **Teacher as Leader**
- EDU 569 **Understanding Teaching and Learning**
- EDU 570 **Instructional Design**
- EDU 618 **Effective Assessment**
- EDU 501 **Teacher as Researcher**
- EDU 622 **Meeting the Needs of All Students**

plus 4 SPECIALTY COURSES:

RDG 500 Foundations of Reading and Literacy

This course provides teachers with a comprehensive knowledge base in the reading process and facility with the most effective instructional and assessment techniques. Based on research from the National Reading Panel and consultation with internationally recognized reading specialists, this course enables participants to identify effective theories and principles for teaching reading in the five major components of the reading process—literacy, phonemic awareness and phonics, fluency, vocabulary, and comprehension— and to apply the most effective instructional plans, methods, and resources in their practice. In addition, the course focuses on methods for assessing reading progress in individuals and groups, and ideas for differentiating instruction for diverse learners.

Course Outcomes:

Participants will be able to:

- Examine issues related to motivating students to read, and create physical spaces that support reading and writing and critical thinking
- Explore the research foundation and instructional implications of the five areas of reading instruction identified by the National Reading Panel as key to reading success
- Examine elements of effective teaching and learning as they come together in one instructional sequence, and focus on how to improve their instructional techniques
- Plan instructional strategies and techniques based on students' needs, teach while checking for understanding, and reflect based on evidence of student achievement

RDG 605 Assessment & Intervention for Struggling Readers

This course focuses on the particular needs of elementary-aged children who struggle to read, but it also stresses the needs of struggling readers of all ages. Participants will study the research base that explains the common causes for reading difficulties. They will apply research-based instructional strategies to help students increase their reading fluency and comprehension. Participants will also develop an intervention plan to help all their students meet grade-level standards.

Course Outcomes:

Participants will be able to:

- Define and describe the characteristics of a struggling reader
- Identify and diagnose a particular struggling reader and his/her needs
- Implement research-based instructional strategies specific to the needs of struggling readers
- Develop an intervention plan that aims at increasing the achievement of all students, including struggling readers

RDG 610 Reading in the Content Areas

This course focuses on ways to integrate effective reading strategies into all subject areas of the curriculum. Participants learn strategies for supporting the comprehension of nonfiction texts and the development of content-area vocabulary, as well as motivational techniques for reluctant learners.

Course Outcomes:

Participants will be able to:

- Employ effective instructional strategies to engage all learners in the reading of informational texts
- Develop subject-area vocabulary that aides in the comprehension of content-specific material
- Utilize strategies that help students make connections to prior learning
- Support the engagement and learning of struggling readers

RDG 615 The Reading and Writing Connection

This course focuses on the writing process and its role in literacy development. As students become fluent readers, they need to balance their literacy time with various types of writing. Participants apply research-based instructional strategies to integrate writing into all subject areas. Specific techniques such as mini-lessons, error analysis, conferencing, and using portfolios are addressed. Each step of the writing process is examined as participants design units of study for their teaching practice.

Course Outcomes:

Participants will be able to:

- Identify, define, and explain all stages of the writing process
- Create learning experiences in which students respond to literature before, during, and after reading
- Employ the use of writing portfolios to measure the growth of writing ability over time
- Examine ways to support the independence of reading and writing in the classroom

MAT: ELEMENTARY MATHEMATICS, K–5

This program focuses on developing instructional leaders and the content knowledge elementary teachers need to know in order to be effective teachers of mathematics. The degree incorporates the Principles and Standards for School Mathematics as outlined by the National Council of Teachers of Mathematics (NCTM).

THE 6 CORE COURSES:

- EDU 568 **Teacher as Leader**
- EDU 569 **Understanding Teaching and Learning**
- EDU 570 **Instructional Design**
- EDU 618 **Effective Assessment**
- EDU 501 **Teacher as Researcher**
- EDU 622 **Meeting the Needs of All Students**

plus 4 SPECIALTY COURSES:

MTH 505 Problem Solving and Number & Operations, K–5

Based on the National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics, this course establishes a foundation of mathematical content knowledge and problem-solving skills. Participants develop deeper understanding of mathematical concepts they are required to teach, and engage in mathematical discourse as a means to explain their thinking and share strategies.

Course Outcomes

Participants will be able to:

- Deepen personal understanding of mathematical content found in elementary grades, such as place value, the operations, fractions, decimals, and percents
- Develop strategies to teach in a problem-based classroom
- Engage in and learn to lead mathematical discourse
- Integrate formative assessment techniques into mathematics instruction

MTH 515 Measurement and Geometry, K–5

Covering Van Hiele levels of geometric thought, and focusing on shapes and properties, transformations, location, and visualization, as well as measurement concepts and skills, this course allows teachers to develop a profound understanding of key mathematical concepts as outlined in the NCTM Principles and Standards for School Mathematics. Participants engage in hands-on problem-solving activities that allow them to apply new understanding to their instructional planning and decision making.

Course Outcomes

Participants will be able to:

- Apply effective problem-solving strategies to real-world problems
- Deepen understanding of mathematical concepts such as length, area, volume, angles, and coordinate geometry
- Apply instructional strategies that help develop geometric thinking

MTH 525 Algebra, K–5

This course focuses on developing algebraic thinking, which includes studying patterns and functions, understanding the structure of the number system, using symbolism meaningfully, and using mathematical modeling to solve problems. Participants study many common misconceptions about the learning of algebra to better understand the potential gaps in students' understanding.

Course Outcomes

Participants will be able to:

- Deepen understanding of patterns, functions, and algebraic symbols
- Analyze repeating and growing patterns and represent these patterns in words, pictures, and numbers
- Express mathematical relationships using equations

MTH 535 Data Analysis and Probability, K–5

This course is structured around the creation and completion of a real-life data analysis project that allows participants to apply knowledge and skills from other mathematical strands. Key concepts such as data collection, graphical representations of data, and measures of center are highlighted.

Course Outcomes

Participants will be able to:

- Design an investigation to address a question and consider how data-collection methods affect the nature of the data set
- Use measures of center, especially the median, and understand what each does and does not indicate about a data set
- Propose and justify conclusions and predictions that are based on data

MAT: MIDDLE SCHOOL MATHEMATICS, 6–8

This program concentrates on developing instructional leaders and the content knowledge middle school teachers need to know in order to be effective teachers of mathematics. The degree incorporates the Principles and Standards for School Mathematics as outlined by the National Council of Teachers of Mathematics (NCTM).

THE 6 CORE COURSES:

- EDU 568 **Teacher as Leader**
- EDU 569 **Understanding Teaching and Learning**
- EDU 570 **Instructional Design**
- EDU 618 **Effective Assessment**
- EDU 501 **Teacher as Researcher**
- EDU 622 **Meeting the Needs of All Students**

plus 4 SPECIALTY COURSES:

MTH 506 Problem Solving and Number & Operations, 6–8

Based on the National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics, this course establishes a foundation of mathematical content knowledge and problem-solving skills. Participants develop deeper understanding of mathematical concepts they are required to teach, and engage in mathematical discourse as a means to explain their thinking and share strategies.

Course Outcomes

Participants will be able to:

- Deepen personal understanding of mathematical content found in middle school mathematics, such as fractions, decimals, percents, ratios, proportions, and developing proportional reasoning
- Develop strategies to teach in a problem-based classroom
- Engage in and learn to lead mathematical discourse
- Integrate formative assessment techniques into mathematics instruction

MTH 516 Measurement and Geometry, 6–8

Covering Van Hiele levels of geometric thought, and focusing on shapes and properties, transformations, location, and visualization, as well as measurement concepts and skills, this course allows teachers to develop a profound understanding of key mathematical concepts as outlined in the NCTM Principles and Standards for School Mathematics. Participants engage in hands-on problem-solving activities that allow them to apply new understanding to their instructional planning and decision making.

Course Outcomes

Participants will be able to:

- Apply effective problem-solving strategies to real-world problems
- Deepen understanding of mathematical concepts such as volume and capacity, similarity and congruence, and solving problems with ratios and proportions
- Apply instructional strategies that help develop geometric thinking

MTH 525 Algebra, 6–8

This course focuses on developing algebraic thinking, which includes studying patterns and functions, understanding the structure of the number system, using symbolism meaningfully, and using mathematical modeling to solve problems. Participants study many common misconceptions about the learning of algebra to better understand the potential gaps in students' understanding.

Course Outcomes

Participants will be able to:

- Identify functions as linear or nonlinear and contrast their properties using tables, graphs, and equations
- Model and solve contextualized problems using graphs, tables, and equations
- Use symbolic algebra to represent situations and solve problems

MTH 536 Data Analysis and Probability, 6–8

This course is structured around the creation and completion of a real-life data analysis project that allows participants to apply knowledge and skills from other mathematical strands. Key concepts such as data collection, graphical representations of data, and measures of center are highlighted.

Course Outcomes

Participants will be able to:

- Design an investigation that includes data-collection and data analysis
- Select, create, and use appropriate graphical representations of data
- Find, use, and interpret measures of center and spread

Further questions? Call toll-free 1-877-984-7277 or email masters@teachscape.com