WESTERN GOVERNORS UNIVERSITY
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Program Guidebook

Master of Arts in Teaching, Mathematics Education (Secondary)

The Master of Arts in Teaching, MathematicsEducation (Secondary)is a competency-based degree program that prepares students at the graduate level both to be licensed to teach mathematics in a secondary setting and to develop significant skills in mathematics curriculum development, design, and evaluation. All work in this degree program is online with the exception of the Demonstration Teaching and in-classroom field experience components, which prepare teacher candidates for the classroom. Candidates develop and refine their teaching skills through a series of sequential experiences beginning with video-based observations of classroom instruction. Observations prepare candidates for an authentic, collaborative pre-clinical teaching experiences in K-12 settings. Clinical experiences culminate with supervised demonstration teaching in a real classroom. Students enter this program with a significant background in mathematics and then proceed through study in the Foundations of Teaching, Instructional Planning and Presentation, Mathematics Education, video-based classroom observation, Pre-Clinical Experiences, Demonstration Teaching and Research Fundamentals.

Understanding the Competency-Based Approach

Practically speaking, how do competency-based programs like those offered at Western Governors University (WGU) work? Unlike traditional universities, WGU does not award degrees based on completion of a certain number of credit hours or a certain set of required courses. Instead, you will earn your degree by demonstrating your skills, knowledge, and understanding of important concepts.

Progress through a degree program is governed not by the amount of time you spend in class but by your ability to demonstrate mastery of competencies as you complete required courses. Of course, you will need to engage in learning experiences as you review competencies or develop knowledge and skills in areas in which you may be weak. To help you acquire the knowledge and skills you need to complete your courses and program, WGU provides a rich array of learning resources. Your program mentor will work closely with you to help you understand the competencies required for your program and to help you create a schedule for completing your courses. You will also work closely with course instructors as you engage in each of your courses. As subject matter experts, course instructors will guide you through the content you must master to pass the course assessments.

The benefit of this competency-based system is that enables students who are knowledgeable about a particular subject to make accelerated progress toward completing a degree, even if they lack college experience. You may have gained skills and knowledge of a subject while on the job, accumulated wisdom through years of life experience, or already taken a course on a particular subject. WGU will award your degree based on the skills and knowledge that you possess and can demonstrate—not the number of credits hours on your transcript.

Accreditation

Western Governors University is the only university in the history of American higher education to have earned accreditation from four regional accrediting commissions. WGU's accreditation was awarded by (1) the Northwest Commission on Colleges and Universities, (2) the Higher Learning Commission of the North Central Association of Colleges and Schools, (3) the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, and (4) the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges. The university's accreditation status is now managed by the Northwest Commission on Colleges and Universities (NWCCU), which reaffirmed WGU's accreditation in February 2017. The WGU Teachers College is accredited by the National Council for Accreditation of Teacher Education (NCATE). The nursing programs are accredited by the Commission on Collegiate Nursing Education (CCNE). The Health Information Management program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College of Business programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The Degree Plan

The focus of your program is your personalized Degree Plan. The Degree Plan is a detailed blueprint of the courses you will need to complete in order to earn your degree. The Degree Plan also lays out the accompanying learning resources and assessments that compose your program. The list of courses in the Degree Plan is often referred to as the standard path. The amount of time it takes to complete your program depends on both the amount of new information you need to learn and the amount of time you plan to devote each week to study.

Students vary widely in the specific skills and information they need to learn. For example, some students may be highly knowledgeable in a particular subject matter and would not need to engage in new learning opportunities. Other students may find that portions of the program require them to learn new information and that they need to take an online class or participate in a study module to acquire the knowledge and skills needed to fulfill program competencies in that area. Some individuals may be able to devote as little as 15–20 hours per week to the program, while others may need to devote more time. For this reason, pre-assessments are there to help your program mentor form a profile of your prior knowledge and create a personalized Degree Plan.

How You Will Interact with Faculty

At WGU, faculty serve in specialized roles, and they will work with you individually to provide the guidance, instruction, and support you will need to succeed and graduate. As a student, it is important for you to take advantage of this support. It is key to your progress and ultimate success.

Upon your enrollment, you will be assigned a program mentor—an expert in your field of study who will provide you with regular program-level guidance and support from the day you start until the day you graduate. Your program mentor will set up regular telephone appointments (weekly at first) with you, which you will be expected to keep. The mentor will review program competencies with you and work with you to develop a plan and schedule for your coursework. Your program mentor will serve as your main point of contact throughout your program—helping you set weekly study goals, recommending specific learning materials, telling you what to expect in courses, and keeping you motivated. In addition to regular calls, your program mentor is available to help you resolve questions and concerns as they arise.

For many of the courses at WGU, you will be required to complete performance assessments. These include reports, papers, presentations, and projects that let you demonstrate your mastery of the required competencies. A separate group of faculty members, called evaluators, will review your work to determine whether it meets requirements. Evaluators are also subject matter experts in their field of evaluation. If your assessment needs further work before it "passes," these evaluators, who review your work anonymously, will provide you with instructional feedback to help you meet evaluation standards and allow you to advance.

Connecting with Other Mentors and Fellow Students

As you proceed through your Degree Plan, you will have direct contact with multiple faculty members. These communications can take a variety of forms, including participation in one-on-one discussions, chats in the learning communities, and live cohort and webinar opportunities. As a WGU student, you will have access to your own personal MyWGU Student Portal, which will provide a gateway to your courses of study, learning resources, and learning communities where you will interact with faculty and other students.

The learning resources in each course are specifically designed to support you as you develop competencies in preparation for your assessments. These learning resources may include reading materials, videos, tutorials, cohort opportunities, community discussions, and live discussions that are guided by course instructors who are experts in their field. You will access your program community

during your orientation course to network with peers who are enrolled in your program and to receive continued support through professional enrichment and program-specific chats, blogs, and discussions. WGU also provides Student Services associates to help you and your program mentor solve any special problems that may arise.

Orientation

The WGU orientation course focuses on acquainting you with WGU's competency-based model, distance education, technology, and other resources and tools available for students. You will also utilize WGU program and course communities, participate in activities, and get to know other students at WGU. The orientation course must be completed before you can start your first term at WGU.

Transferability of Prior College Coursework

Because WGU is a competency-based institution, it does not award degrees based on credits but rather on demonstration of competency. However, if you have completed college coursework at another accredited institution, or if you have completed industry certifications, you may have your transcripts and certifications evaluated to determine if you are eligible to receive some transfer credit. The guidelines for determining what credits will be granted varies based on the degree program. Students entering graduate programs must have their undergraduate degree verified before being admitted to WGU. To review more information in regards to transfer guidelines based on the different degree programs, you may visit the Student Handbook found at the link below and search for "Transfer Credit Evaluation." Within the Teachers College, there may be additional courses to meet state requirements.

[Click here for the Student Handbook](#)

WGU does not waive any requirements based on a student's professional experience and does not perform a "résumé review" or "portfolio review" that will automatically waive any degree requirements. Degree requirements and transferability rules are subject to change in order to keep the degree content relevant and current.

Remember, WGU's competency-based approach lets you take advantage of your knowledge and skills, regardless of how you obtained them. Even when you do not directly receive credit, the knowledge you possess may help you accelerate the time it takes to complete your degree program.

Continuous Enrollment, On Time Progress, and Satisfactory Academic Progress

WGU is a "continuous enrollment" institution, which means you will be automatically enrolled in each of your new terms while you are at WGU. Each term is six months long. Longer terms and continuous enrollment allow you to focus on your studies without the hassle of unnatural breaks between terms that you would experience at a more traditional university. At the end of every six-month term, you and your program mentor will review the progress you have made and revise your Degree Plan for your next six-month term.

WGU requires that students make measurable progress toward the completion of their degree programs every term. We call this "On-Time Progress," denoting that you are on track and making progress toward on-time graduation. As full-time students, graduate students must enroll in at least 8

competency units each term, and undergraduate students must enroll in at least 12 competency units each term. Completing at least these minimum enrollments is essential to On-Time Progress and serves as a baseline from which you may accelerate your program. We measure your progress based on the courses you are able to pass, not on your accumulation of credit hours or course grades. Every time you pass a course, you are demonstrating that you have mastered skills and knowledge in your degree program. For comparison to traditional grading systems, passing a course means you have demonstrated competency equivalent to a "B" grade or better.

WGU assigns competency units to each course in order to track your progress through the program. A competency unit is equivalent to one semester credit of learning. Some courses may be assigned 3 competency units while others may be as large as 12 competency units.

Satisfactory Academic Progress (SAP) is particularly important to students on financial aid because you must achieve SAP in order to maintain eligibility for financial aid. We will measure your SAP quantitatively by reviewing the number of competency units you have completed each term. In order to remain in good academic standing, you must complete at least 66.67% of the units you attempt over the length of your program—including any courses you add to your term to accelerate your progress. Additionally, during your first term at WGU you must pass at least 3 competency units in order to remain eligible for financial aid. We know that SAP is complex, so please contact a financial aid counselor should you have additional questions. *Please note: The Endorsement Preparation Program in Educational Leadership is not eligible for federal financial aid.

Courses

Your Degree Plan includes courses needed to complete your program. To obtain your degree, you will be required to demonstrate your skills and knowledge by completing the assessment(s) for each course. In general there are two types of assessments: performance assessments and objective assessments. Performance assessments contain, in most cases, multiple scored tasks such as projects, essays, and research papers. Objective assessments include multiple-choice items, multiple-selection items, matching, short answer, drag-and-drop, and point-and-click item types, as well as case study and video-based items. Certifications verified through third parties may also be included in your program. More detailed information about each assessment is provided in each course of study.

External Content & Basic Skills Exams

Western Governors University requires that candidates pass the state-mandated content exam that aligns with their WGU program in addition to a basic skills exam (initial licensure programs only). Specific information regarding required content and basic skills exams required for each program and state can be found in the WGU Student Handbook. In many cases, it is the candidates' responsibility to register and pay for the required exams and submit their official passing score reports to WGU.

State Licensure Requirements

Many states have specific licensure requirements that are not part of WGU programs that you will have to fulfill in addition to the degree requirements of your program. These state licensure requirements might include, but are not limited to: subject-specific licensure exams, state-specific teacher performance assessments, course work related to state history, basic skills exams, and background clearances. The WGU Student Handbook outlines the credentialing requirements of each state. Teacher

candidates should consult the applicable section to become familiar with their state's expectations regarding licensure..

Learning Resources

WGU works with many different educational partners, including enterprises, publishers, training companies, and higher educational institutions, to provide high-quality and effective learning resources that match the competencies you are developing. These vary in type, and may be combined to create the best learning experience for your course. A learning resource can be an e-textbook, online module, study guide, simulation, virtual lab, tutorial, or a combination of these. The cost of most learning resources are included in your tuition and Learning Resource Fee. They can be accessed or enrolled for through your courses. Some degree-specific resources are not covered by your tuition, and you will need to cover those costs separately. WGU also provides a robust library to help you obtain additional learning resources, as needed.

Mobile Compatibility:

The following article provides additional details about the current state of mobile compatibility for learning resources at WGU. It includes a list that can be referenced to determine the mobile friendliness of all core course materials used in a program.

[Student Handbook article: Can I use my mobile device for learning resources?](#)

Standard Path

As previously mentioned, competency units (CUs) have been assigned to each course in order to measure your academic progress. If you are an undergraduate student, you will be expected to enroll in a minimum of 12 competency units each term. Graduate students are expected to enroll in a minimum of 8 competency units each term. A standard plan for a student for this program who entered WGU without any transfer units would look similar to the one on the following page. Your personal progress can be faster, but your pace will be determined by the extent of your transfer units, your time commitment, and your determination to proceed at a faster rate.

Standard Path *for* Master of Arts in Teaching, Mathematics Education (Secondary)

Course Description	CUs	Term
Foundational Perspectives of Education	2	1
Principles of Psychology, Child and Adolescent Development for Educators	3	1
Fundamentals of Diversity, Inclusion, and Exceptional Learners	2	1
Classroom Management, Engagement, and Motivation	2	1
Educational Assessment	2	2
Mathematics Learning and Teaching	2	2
Secondary Reading Instruction and Interventions	3	2
Instructional Planning and Presentation in Mathematics	2	2
Secondary Disciplinary Literacy	3	3
Algebra for Secondary Mathematics Teaching	2	3
Geometry for Secondary Mathematics Teaching	2	3
Statistics and Probability for Secondary Mathematics Teaching	2	3
Preclinical Experiences in Mathematics	2	4
Mathematics History and Technology	2	4
Research Foundations	2	4
Supervised Demonstration Teaching in Mathematics, Observations 1 and 2	3	5
Supervised Demonstration Teaching in Mathematics, Observation 3 and Midterm	3	5
Supervised Demonstration Teaching in Mathematics, Observations 4 and 5	3	5
Supervised Demonstration Teaching in Mathematics, Observation 6 and Final	3	5
Teacher Performance Assessment in Mathematics Education	1	5
Professional Portfolio	1	5
Cohort Seminar	1	5

Changes to Curriculum

WGU publishes an Institutional Catalog, which describes the academic requirements of each degree program. Although students are required to complete the program version current at the time of their enrollment, WGU may modify requirements and course offerings within that version of the program to maintain the currency and relevance of WGU's competencies and programs. As these changes are implemented, WGU will ensure that the length of the student's degree program (i.e., total competency unit requirements) will not increase and that competency units already earned will be applied to the updated program version. When program requirements are updated, students readmitting after withdrawal from the university will be expected to re-enter into the most current catalog version of the program.

Areas of Study for Master of Arts in Teaching, Mathematics Education (Secondary)

The following section includes the areas of study in the program, with their associated courses. Your specific learning resources and level of instructional support will vary based on the individual competencies you bring to the program and your confidence in developing the knowledge, skills, and abilities required in each area of the degree. The Degree Plan and learning resources are dynamic, so you need to review your Degree Plan and seek the advice of your mentor regarding the resources before you purchase them.

Foundations of Teaching

Foundational Perspectives of Education

This course provides an introduction to the historical, legal, and philosophical foundations of education. Current educational trends, reform movements, major federal and state laws, legal and ethical responsibilities, and an overview of standards-based curriculum are the focus of the course. The course of study presents a discussion of changes and challenges in contemporary education. It covers the diversity found in American schools, introduces emerging educational technology trends, and provides an overview of contemporary topics in education.

This course covers the following competencies:

- *The graduate evaluates the impact of various educational philosophies on historical and current educational trends.*

- *The graduate evaluates the impact of various social issues and influences on students, teachers, instruction, and schools.*

- *The graduate evaluates the affordances and challenges of standards-based curriculum on students, teachers, instruction, and schools.*

- *The graduate analyzes the role of federal and state governance in determining standard educational practices and ensuring access to educational opportunities.*

- *The graduate analyzes the relationship of current trends in education and educational reform to historical foundations and evolution of the industry.*

Principles of Psychology, Child and Adolescent Development for Educators

This course prepares candidates to support classroom practices with research-validated concepts in the areas of educational psychology and child/adolescent development. Candidates will be introduced to learning theories that equip them with knowledge and skills necessary to support the diverse populations of students with whom they will interact. Theories of human development, spanning early childhood through adolescence, also will be addressed, and students completing this course will be able to explain and analyze the guiding perspectives on physical, cognitive, and social development. Appropriate instructional and assessment strategies to support student learning and development also will be addressed. Students will complete ten hours of video-based classroom observations related to issues in educational psychology and learner development.

This course covers the following competencies:

- *The graduate summarizes how educational psychology and related tools apply to the improvement of professional practice.*

- *The graduate explains approaches to instruction for creating objectives and helping students to obtain the objectives.*

- *The graduate analyzes the physical, cognitive, and social development of humans from early childhood through adolescence.*

- *The graduate explains the two-fold process and its relevance to lesson planning for student learning assessment, using teacher measures and professionally prepared standardized tests.*

- *The graduate explains guiding perspectives, theories, and influences on physical, cognitive, and social development across childhood and adolescence.*

- *The graduate summarizes how the different learning theories create a complex learning process from different perspectives.*

- *The graduate analyzes the theoretical and practical implications of various instructional practices intended to support the use of educational psychology in the classroom.*

Fundamentals of Diversity, Inclusion, and Exceptional Learners

Fundamentals of Diversity, Inclusion, and Exceptional Learners prepares candidates to make decisions based on the history of inclusion and to develop practical strategies for differentiating instruction, in accordance with legal expectations, to meet the needs of a diverse learner population while creating a safe, inclusive, and culturally responsive learning space. Diverse populations include learners with disabilities, gifted and talented learners, culturally diverse learners, and English language learners. Candidates will learn when to employ assistive technologies to meet student needs, and they will begin to develop their skills for partnering with parents and advocating for students. Candidates will complete ten hours of video-based classroom observations focused on the needs of diverse and exceptional learners. This course has no prerequisites.

This course covers the following competencies:

- *The graduate analyzes the theoretical and practical implications of various instructional practices intended to support diversity and inclusion in the classroom.*

- *The graduate integrates knowledge of characteristics, contexts, and conditions of students in the process to address the needs of multicultural learners, exceptional learners, atypical development, English language learners, and gifted and talented learners and to implement equity pedagogy into their practice.*

- *The graduate selects appropriate strategies to effectively and ethically engage with students, families, administrators, and other stakeholders in support of the education of diverse learners.*

- *The graduate selects appropriate technology tools and accommodations to support the education of diverse learners.*

- *The graduate recommends best practices to plan classroom instruction in a supportive learning environment for ELL students.*

- *The graduate applies appropriate policies, programs, accepted practices, and legal requirements to classroom and instructional practices as they relate to special education, English language learners, and gifted and talented learners.*

Classroom Management, Engagement, and Motivation

Students will learn the foundations for effective classroom management as well as strategies for creating a safe, positive learning environment for all learners. Students will be introduced to systems that promote student self-awareness, self-management, self-efficacy, and self-esteem. In this course, students will engage practical application via ten hours of video classroom observations. Students will reflect on how teachers use rules/procedures to maximize student learning and on what makes a highly effective classroom environment. As part of a culminating experience in this course, students will, through the video observation reflections, describe their current teaching philosophy related to classroom environment and management.

This course covers the following competencies:

- *The graduate designs emotionally safe classroom environments that foster learning and deal effectively with emotions, conflicts, and serious behavior problems.*

- *The graduate appropriately uses technology to enhance teaching, learning, engagement, and motivation.*

- *The graduate analyzes major strategies of classroom management as they apply to specific areas of specialization.*

- *The graduate generates appropriate instructional interventions for a variety of students and learning contexts.*

- *The graduate evaluates best practices that encourage positive social interaction, self-motivation, and active engagement in learning environments.*

- *The graduate incorporates evidence-based strategies and materials in the design of classroom management plans.*

- *The graduate integrates strategies for managing routine misbehaviors into classroom management strategies and procedures.*

- *The graduate analyzes the theoretical and practical implications of various instructional practices intended to support classroom management.*

- *The graduate analyzes classroom management strategies and approaches that promote student self-awareness, self-management, self-efficacy, and self-esteem.*

Educational Assessment

Educational Assessment assists students in making appropriate data-driven instructional decisions by exploring key concepts relevant to the administration, scoring, and interpretation of classroom assessments. Topics include ethical assessment practices, designing assessments, aligning assessments, and utilizing technology for assessment.

This course covers the following competencies:

- *The graduate analyzes assessment information to inform instructional decision-making and to support and adapt instruction for all students, including those individuals with exceptional learning needs.*

- *The graduate evaluates assessment results to make informed educational recommendations, including those for program and school improvement.*

- *The graduate applies effective methods and strategies in the planning, development, and evaluation of student assessment.*

- *The graduate recommends effective strategies for ensuring the responsible and ethical assessment of students.*

- *The graduate effectively and appropriately communicates the results of assessments with stakeholders, including students.*

- *The graduate plans and designs assessments aligned to learning outcomes, standards, benchmarks, and objectives.*

Mathematics Education

Mathematics Learning and Teaching

Mathematics Learning and Teaching will help you develop the knowledge and skills necessary to become a prospective and practicing educator. You will be able to use a variety of instructional strategies to effectively facilitate the learning of mathematics. This course focuses on selecting appropriate resources, using multiple strategies, and instructional planning, with methods based on research and problem solving. A deep understanding of the knowledge, skills, and disposition of mathematics pedagogy is necessary to become an effective secondary mathematics educator. There are no prerequisites for this course.

This course covers the following competencies:

- *The graduate integrates principles and models of teaching for understanding into learning activities.*

- *The graduate evaluates learning activities for alignment with the National Council of Teachers of Mathematics (NCTM) standards.*

- *The graduate incorporates standards and best practices for the teaching and learning of mathematics for all students into instructional practice.*

- *The graduate evaluates teaching tools and strategies for the purpose of planning learning activities.*

- *The graduate accommodates the needs and abilities of diverse students in the planning of learning activities.*

- *The graduate uses multiple assessment strategies to evaluate student understanding and guide instruction.*

- *The graduate integrates problem solving into learning activities to build conceptual understanding.*

Algebra for Secondary Mathematics Teaching

Algebra for Secondary Mathematics Teaching explores important conceptual underpinnings, common misconceptions and students' ways of thinking, appropriate use of technology, and instructional practices to support and assess the learning of algebra. Secondary teachers should have an understanding of the following: algebra as an extension of number, operation, and quantity; various ideas of equivalence as it pertains to algebraic structures; patterns of change as covariation between quantities; connections between representations (tables, graphs, equations, geometric models, context); and the historical development of content and perspectives from diverse cultures. In particular, the focus should be on deeper understanding of rational numbers, ratios and proportions, meaning and use of variables, functions (e.g., exponential, logarithmic, polynomials, rational, quadratic), and inverses. Calculus I is a prerequisite for this course.

This course covers the following competencies:

- *The graduate analyzes historical development, perspectives from diverse cultures, and content knowledge to deepen a student's algebraic understanding.*

- *The graduate analyzes conceptual algebra underpinnings, common misconceptions, and students' ways of thinking to create opportunities to learn.*

- *The graduate integrates technology to support and assess students' learning of algebra.*

- *The graduate integrates instructional practices to support and assess students' understanding of algebra.*

Geometry for Secondary Mathematics Teaching

Geometry for Secondary Mathematics Teaching explores important conceptual underpinnings, common misconceptions and students' ways of thinking, appropriate use of technology, and instructional practices to support and assess the learning of geometry. Secondary teachers in this course will develop a deep understanding of constructions and transformations, congruence and similarity, analytic geometry, solid geometry, conics, trigonometry, and the historical development of content. Calculus I is a prerequisite for this course.

This course covers the following competencies:

- *The graduate integrates technology to support and assess students' learning of geometry.*

- *The graduate integrates instructional practices to support and assess students' understanding of geometry.*

- *The graduate analyzes historical development, perspectives from diverse cultures, and content knowledge to deepen a student's geometry understanding.*

- *The graduate analyzes conceptual geometry underpinnings, common misconceptions, and students' ways of thinking to create opportunities to learn.*

Statistics and Probability for Secondary Mathematics Teaching

Statistics and Probability for Secondary Mathematics Teaching explores important conceptual underpinnings, common misconceptions and students' ways of thinking, appropriate use of technology, and instructional practices to support and assess the learning of statistics and probability. Secondary teachers should have a deep understanding of summarizing and representing data, study design and sampling, probability, testing claims and drawing conclusions, and the historical development of content and perspectives from diverse cultures. Calculus I is a prerequisite for this course.

This course covers the following competencies:

- *The graduate analyzes historical development, perspectives from diverse cultures, and content knowledge to deepen a student's statistics and probability understanding.*

- *The graduate integrates instructional practices to support and assess students' understanding of statistics and probability.*

- *The graduate analyzes conceptual statistics and probability underpinnings, common misconceptions, and students' ways of thinking to create opportunities to learn.*

- *The graduate integrates technology to support and assess students' learning of statistics and probability.*

Mathematics History and Technology

In this course, you will learn about a variety of technological tools for doing mathematics, and develop a broad understanding of the historical development of mathematics. You will come to understand that mathematics is a very human subject that comes from the macro-level sweep of cultural and societal change, as well as the micro-level actions of individuals with personal, professional, and philosophical motivations. You will focus on the historical development of mathematics including contributions of significant figures and diverse cultures. Most importantly, you will learn to evaluate and apply technological tools and historical information to create an enriching student-centered mathematical learning environment.

This course covers the following competencies:

- *The graduate analyzes the historical development of methods in mathematics.*

- *The graduate analyzes the humanistic, social, and political influences on mathematical discoveries and the applications and effect of those discoveries.*

- *The graduate integrates student-centered technology in the planning of learning activities to build understanding of mathematical concepts and promote creativity.*

- *The graduate integrates mathematics history into the planning of learning activities to improve student learning.*

- *The graduate analyzes major historical developments and cultural contributions in number systems, algebra, geometry, calculus, discrete mathematics, statistics and probability, and measurement.*

- *The graduate utilizes appropriate industry-standard technological tools to solve problems.*

- *The graduate evaluates technological tools for appropriate use in a variety of situations.*

Effective Teaching Practices

Secondary Reading Instruction and Interventions

Secondary Reading Instruction and Intervention explores the comprehensive, student-centered Response to Intervention (RTI) assessment and intervention model used to identify and address the needs of learners in middle school and high school who struggle with reading comprehension and/or information retention. Course content provides educators with effective strategies designed to scaffold instruction and help learners develop increased skill in the following areas: reading, vocabulary, text structures and genres, and logical reasoning related to the academic disciplines. This course has no prerequisites.

This course covers the following competencies:

- *The graduate explains how the Response to Intervention (RTI) approach identifies, monitors, and differentiates instruction to ensure that struggling readers obtain the appropriate support and interventions to improve academic progress.*

- *The graduate integrates knowledge of effective comprehension strategies to help students monitor and improve their own comprehension when reading.*

- *The graduate develops effective vocabulary instruction to enhance students' reading comprehension in the content areas.*

- *The graduate integrates reading assessments to make informed instructional and placement decisions.*

- *The graduate integrates reading strategies that scaffold instruction for students when reading increasingly complex texts.*

Secondary Disciplinary Literacy

Secondary Disciplinary Literacy examines teaching strategies designed to help learners in middle and high school improve upon the literacy skills required to read, write, and think critically while engaging content in different academic disciplines. Themes include exploring how language structures, text features, vocabulary, and context influence reading comprehension across the curriculum. Course content highlights strategies and tools designed to help teachers assess the

reading comprehension and writing proficiency of learners and provides strategies to support students' reading and writing success in all curriculum areas. This course has no prerequisites.

This course covers the following competencies:

- *The graduate integrates discipline-specific literacy instruction to help students understand the text structures, vocabulary, and language knowledge required for specific disciplines.*

- *The graduate plans writing activities that promote understanding of discipline-specific content through the organization, analysis, and synthesis of ideas.*

- *The graduate integrates instructional strategies and materials in disciplinary literacy practices to enhance student understanding within the disciplines.*

- *The graduate distinguishes between the basic strategies used to facilitate comprehension in the content areas and the specialized reading practices needed to comprehend text in a specific discipline.*

- *The graduate creates authentic learning tasks and activities that provide students with opportunities to demonstrate discipline specific understandings.*

Instructional Planning and Presentation

Instructional Planning and Presentation in Mathematics

Instructional Planning and Presentation assists students as they continue to build instructional planning skills. Topics include unit and lesson planning, instructional presentation strategies, assessment, engagement, integration of learning across the curriculum, effective grouping strategies, technology in the classroom, and using data to inform instruction.

This course covers the following competencies:

- *The graduate integrates appropriate and effective presentation strategies in the planning or delivery of lessons for a variety of learners.*

- *The graduate effectively evaluates and integrates standards, learning outcomes, assessment, instructional strategies, and learning resources in the development and modification of unit and lesson plans.*

- *The graduate integrates research derived from evidence-based practice into the planning and delivery of meaningful, relevant, and engaging instruction and assessment.*

- *The graduate uses technology appropriately in the planning and delivery of meaningful, relevant, and engaging instruction.*

- *The graduate develops active learning opportunities for a variety of students to promote meaningful, relevant, and engaging student-focused instruction.*

- *The graduate effectively and appropriately uses data, including assessment results, in the planning, delivery, and evaluation of meaningful, relevant, and engaging instruction.*

- *The graduate develops instructional materials that effectively incorporate prior learning and cross-curricular learning outcomes to promote relevant, meaningful, and engaging instruction.*

- *The graduate incorporates various grouping strategies into instruction to facilitate learning for all students.*

- *The graduate plans safe and engaging learning environments that foster cultural and community understanding, collaboration, student voice, positive social interactions, and that include individuals with exceptional learning needs.*

Pre-Clinical Experiences

Preclinical Experiences in Mathematics

Preclinical Experiences in Mathematics provides students the opportunity to observe and participate in a wide range of in-classroom teaching experiences in order to develop the skills and confidence necessary to be an effective teacher. Students will reflect on and document the 75 hours of in-classroom observation and experience in their performance assessments. Prior to entering the classroom for the observations, students will be required to meet several requirements

including a cleared background check, passing scores on the state or WGU required basic skills exam and a completed resume.

This course covers the following competencies:

- *The graduate evaluates the theoretical, legal, ethical, and practical applications of teaching students with exceptional learning needs.*

- *The graduate develops a classroom management plan that integrates best practices for engagement and motivation.*

- *The graduate evaluates the theoretical and practical applications of various assessment practices as they relate to student learning and instructional design.*

- *The graduate evaluates the theoretical and practical implications of various strategies that are intended to support the use of academic language, metacognition, and communication in classroom contexts.*

- *The graduate evaluates the theoretical and practical implications of various content knowledge applications, tools of inquiry, instructional strategies, models and trends in the context of classrooms and schools.*

- *The graduate evaluates various applications of technological integration in support of learning for all students.*

- *The graduate collaborates with a mentor teacher in the planning and delivery of instruction in a classroom setting.*

- *The graduate evaluates educational observations and experiences connected to professional practices to support the development of appropriate teaching dispositions and a personal teaching philosophy.*

Research

Research Foundations

The Research Foundations course focuses on the essential concepts of four major research approaches, including quantitative, qualitative, mixed, and action research. No original data collection or analysis will be required in this course.

This course covers the following competencies:

- *The graduate applies and justifies appropriate research methods and design in quantitative, qualitative, mixed methods, and action research scenarios to address the research question(s).*

- *The graduate analyzes the key aspects of quantitative research and characterizes the major approaches to quantitative research.*

- *The graduate analyzes the key aspects of mixed methods research and characterizes the major approaches to mixed methods research.*

- *The graduate analyzes the characteristics of research quality and the potential threats to the quality of results in qualitative, quantitative, mixed methods, and action research studies.*

- *The graduate analyzes the key aspects of qualitative research and characterizes the major approaches to qualitative research.*

- *The graduate analyzes different measurement scales and differentiates between reliability and validity, and their subtypes, as they relate to assessments.*

- *The graduate evaluates and selects appropriate basic data analysis techniques for quantitative, qualitative, mixed methods, and action research scenarios.*

- *The graduate develops clear research questions that can be investigated and hypotheses that can be tested with empirical data.*

- *The graduate analyzes ethical issues and identifies appropriate procedures for educational research.*

- *The graduate analyzes the key aspects of action research and characterizes the major approaches to action research.*

- *The graduate describes the purpose for a literature review and develops an organized literature review relevant to educational research topics, problems, and questions.*

- *The graduate evaluates the purpose, process, and practice of the generation and justification of knowledge in*

educational research.

- *The graduate differentiates among the major methods of data collection, including their strengths and limitations in the selection of an appropriate method of data collection.*

- *The graduate completes a research proposal.*

Demonstration Teaching

Supervised Demonstration Teaching in Mathematics, Observations 1 and 2

Supervised Demonstration Teaching in Mathematics involves a series of classroom performance observations by the host teacher and clinical supervisor that develop comprehensive performance data about the teacher candidate's skills.

This course covers the following competencies:

- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*

- *The graduate integrates appropriate central concepts, tools of inquiry, and structures of the discipline to make content accessible and meaningful for all students and to assure mastery.*

- *The graduate provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*

- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*

- *The graduate integrates a variety of instructional strategies that engage students in the learning process and encourage deep understanding of content and development of the skills needed to apply knowledge in meaningful ways.*

- *The graduate integrates multiple methods of assessment that engage students in their own growth, document student progress, and inform ongoing planning and instruction.*

- *The graduate integrates effective strategies to manage the delivery of lesson content.*

- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*

Supervised Demonstration Teaching in Mathematics, Observation 3 and Midterm

Supervised Demonstration Teaching in Mathematics involves a series of classroom performance observations by the host teacher and clinical supervisor that develop comprehensive performance data about the teacher candidate's skills.

This course covers the following competencies:

- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*

- *The graduate integrates appropriate central concepts, tools of inquiry, and structures of the discipline to make content accessible and meaningful for all students and to assure mastery.*

- *The graduate provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*

- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*

- *The graduate integrates a variety of instructional strategies that engage students in the learning process and encourage deep understanding of content and development of the skills needed to apply knowledge in meaningful ways.*

- *The graduate integrates multiple methods of assessment that engage students in their own growth, document*

student progress, and inform ongoing planning and instruction.

- *The graduate integrates effective strategies to manage the delivery of lesson content.*

- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*

Supervised Demonstration Teaching in Mathematics, Observations 4 and 5

Supervised Demonstration Teaching in Mathematics involves a series of classroom performance observations by the host teacher and clinical supervisor that develop comprehensive performance data about the teacher candidate's skills.

This course covers the following competencies:

- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*

- *The graduate integrates appropriate central concepts, tools of inquiry, and structures of the discipline to make content accessible and meaningful for all students and to assure mastery.*

- *The graduate provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*

- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*

- *The graduate integrates a variety of instructional strategies that engage students in the learning process and encourage deep understanding of content and development of the skills needed to apply knowledge in meaningful ways.*

- *The graduate integrates multiple methods of assessment that engage students in their own growth, document student progress, and inform ongoing planning and instruction.*

- *The graduate integrates effective strategies to manage the delivery of lesson content.*

- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*

Supervised Demonstration Teaching in Mathematics, Observation 6 and Final

Supervised Demonstration Teaching in Mathematics involves a series of classroom performance observations by the host teacher and clinical supervisor that develop comprehensive performance data about the teacher candidate's skills.

This course covers the following competencies:

- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*

- *The graduate integrates appropriate central concepts, tools of inquiry, and structures of the discipline to make content accessible and meaningful for all students and to assure mastery.*

- *The graduate provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*

- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*

- *The graduate integrates a variety of instructional strategies that engage students in the learning process and encourage deep understanding of content and development of the skills needed to apply knowledge in meaningful ways.*

- *The graduate integrates multiple methods of assessment that engage students in their own growth, document student progress, and inform ongoing planning and instruction.*

- *The graduate integrates effective strategies to manage the delivery of lesson content.*

- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*

Teacher Performance Assessment in Mathematics Education

The Teacher Performance Assessment is a culmination of the wide variety of skills learned during your time in the Teachers College at WGU. In order to be a competent and independent classroom teacher, you will showcase a collection of your content, planning, instructional, and reflective skills in this professional assessment.

This course covers the following competencies:

- *The graduate integrates strategies to develop academic language that facilitates effective student participation and engagement in learning.*

- *The graduate utilizes assessment data to profile student learning, communicate information about student progress and achievement, and guide and modify instruction.*

- *The graduate evaluates the teaching context to accommodate student differences to plan for instruction and assessment.*

- *The graduate plans comprehensive learning segments of instruction and assessment that align with standards and the needs of students.*

- *The graduate evaluates teaching experiences including the planning and implementing of curriculum and instruction through ongoing reflection.*

- *The graduate plans learning environments that support individual learning, collaboration, and positive social interaction.*

- *The graduate applies instructional strategies that promote learning, engage students, and provide differentiated instruction.*

Professional Portfolio

You will create an online teaching portfolio that includes professional artifacts (e.g., resume and Philosophy of Teaching Statement) that demonstrate the skills you have acquired throughout your Demonstration Teaching experience.

This course covers the following competencies:

- *The graduate integrates a variety of strategies and resources to differentiate instruction and meet the needs of diverse learners.*

- *The graduate demonstrates ethical responsibilities and appropriate teaching dispositions, including those outlined in the Western Governors University Teachers College Code of Ethics.*

- *The graduate integrates technology into classroom learning experiences to enhance student learning and monitor academic progress.*

- *The graduate recommends strategies that support the development of academic language for all students.*

- *The graduate recommends improvements for instruction and professional practice through personal reflection.*

- *The graduate develops appropriate plans for professional growth in subject matter knowledge and pedagogical skills, including habits and skills of continual inquiry and learning.*

Cohort Seminar

Cohort Seminar provides mentoring and supports teacher candidates during their demonstration teaching period by providing weekly collaboration and instruction related to the demonstration teaching experience. It facilitates their demonstration of competence in becoming reflective practitioners, adhering to ethical standards, practicing inclusion in a diverse classroom, exploring community resources, building collegial and collaborative relationships with teachers, and considering leadership and supervisory skills.

This course covers the following competencies:

- *The graduate recommends effective strategies to maintain high levels of student engagement.*

- *The graduate demonstrates the ability to positively impact student learning through work samples, student artifacts, assessment results, and reflection.*

- *The graduate integrates a variety of strategies and resources to differentiate instruction and meet the needs of diverse learners.*

- *The graduate demonstrates ethical responsibilities and appropriate teaching dispositions, including those outlined in the Western Governors University Teachers College Code of Ethics.*

- *The graduate recommends strategies that support the development of academic language for all students.*

- *The graduate selects community resources that support students' non-instructional needs in and out of the classroom.*

- *The graduate recommends improvements for instruction and professional practice through personal reflection.*

- *The graduate recommends best practices for classroom management, effective transitions, and pacing to maximize instructional time.*

- *The graduate recommends strategies for effectively collaborating with colleagues, parents, and community professionals to support student development, learning, and well being.*

- *The graduate develops appropriate plans for professional growth in subject matter knowledge and pedagogical skills, including habits and skills of continual inquiry and learning.*

Need More Information? WGU Student Services

WGU's Student Services team is dedicated exclusively to helping you achieve your academic goals. The Student Services office is available during extended hours to assist with general questions and administrative or accessibility issues. The Student Services team members help you resolve issues, listen to student issues and concerns, and make recommendations for improving policy and practice based on student feedback. The Student Services team provides a formal means by which you can express your views, which in turn will inform the decisions we make.

Student Services team members also assist with unresolved concerns to find equitable resolutions. To contact the Student Services team, please feel free to call 877-435-7948 or e-mail studentservices@wgu.edu. We are available Monday through Friday from 6:00 a.m. to 10:00 p.m., Saturday from 7:00 a.m. to 7:00 p.m., mountain standard time. Closed Sundays.

If you have inquiries or concerns that require technical support, please contact the WGU IT Service Desk. The IT Service Desk is available Monday through Friday, 6:00 a.m. to 10:00 p.m. and Saturday and Sunday, 10:00 a.m. to 7:00 p.m., mountain standard time. To contact the IT Service Desk, please call 1-877-HELP-WGU (877-435-7948) or e-mail servicedesk@wgu.edu. The support teams are generally closed in observance of university holidays.

For the most current information regarding WGU support services, please visit "Student Support" on the Student Portal at http://my.wgu.edu.