



## Program Guidebook

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### Master of Arts in Teaching, Science Education (Secondary)

*The Master of Arts in Teaching (Secondary Science Education) is a competency-based degree program that prepares students at the graduate level to be licensed to teach secondary science and supports development of significant skills in science 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 and participation in simulated classroom environments. 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 substantial background in science and proceed through coursework in Foundations of Teaching, Pedagogy, Science Education, Research, video-based classroom observation, Field Experiences, and Demonstration Teaching.*

## 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 2020. The WGU Teachers College is accredited at the initial-licensure level by the Council for the Accreditation of Educator Preparation (CAEP) and by the Association of Advancing Quality in Educator Preparation (AAQEP). 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. WGU undergraduate programs may accept transfer credits or apply a

'Requirement Satisfied' (RS) in some cases. Refer to your specific program transfer guidelines to determine what can be satisfied by previously earned college credits. In most cases, WGU does not accept college transfer credits at the graduate (master's) level. Students entering graduate programs must have their undergraduate degree transcripts verified before being admitted to WGU. In addition to a program's standard course path, there may be additional state-specific 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, Science Education (Secondary)

| Course Description   | CUs | Term |
|--|-----|------|
| Foundations of Education   | 2   | 1    |
| Educational Psychology and Human Development of Children and Adolescents | 3   | 1    |
| Schools as Communities of Care   | 2   | 1    |
| Essential Practices for Supporting Diverse Learners                      | 3   | 1    |
| Creating and Managing Engaging Learning Environments                     | 2   | 2    |
| Curriculum, Instruction, and Assessment                                  | 2   | 2    |
| Assessing Student Learning   | 2   | 2    |
| Using Educational Technology for Teaching and Learning                   | 2   | 2    |
| Secondary Reading Instruction and Interventions                          | 2   | 3    |
| Secondary Disciplinary Literacy  | 2   | 3    |
| Science, Technology, and Society   | 2   | 3    |
| Science Methods  | 3   | 3    |
| Preclinical Experiences in Science                                       | 2   | 4    |
| Supervised Demonstration Teaching in Science, Observations 1 and 2       | 2   | 5    |
| Supervised Demonstration Teaching in Science, Observation 3 and Midterm  | 2   | 5    |
| Supervised Demonstration Teaching in Science, Observations 4 and 5       | 2   | 5    |
| Supervised Demonstration Teaching in Science, Observation 6 and Final    | 2   | 5    |
| Teacher Performance Assessment in Science                                | 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. 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, Science 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.

## Professional Core

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### Foundations of Education

Foundations of Education is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course introduces candidates to foundational knowledge about the teaching profession in the current educational context and the historical and cultural influences on P-12 education in the United States. This course addresses important topics that affect educators today including state standards-based curriculum, legal and ethical requirements, and professionalism. This course will culminate in evidence-based, practical application of current strategies, theories, or philosophical perspectives related to becoming an effective educator within the current school context. Candidates will engage in five hours of preclinical experiences, which include virtual observations of learning environments in multiple school settings, and an interview with an educator to gain insight on how these topics affect and inform teaching practice. Cross-cutting themes of technology and diversity are introduced for further development throughout the candidate's programs.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate analyzes the role of historical and cultural influences, including issues of federal and state governance, in determining standard educational practices and ensuring equal access to educational opportunities.*
- *The graduate examines the impact of standards-based curriculum on students and teachers to determine how it supports a school's goals.*
- *The graduate evaluates the application of educational best practices in diverse learning settings to inform teaching practice.*
- *The graduate explores pathways and opportunities for professional development to grow as an educator.*
- *The graduate explains the historical, cultural or legal influences on specific situations within the current school context.*

### Educational Psychology and Human Development of Children and Adolescents

Educational Psychology and Human Development of Children and Adolescents is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course introduces candidates to research-validated theories of human development and psychology, spanning from early childhood through adolescence, and their applications in teaching practice. Candidates will explore how linguistic, physical, cognitive, and social development influence the learning process and inform educational approaches. This course will also cover appropriate instructional and assessment strategies that can be used to support learning for developmentally diverse student populations. The course will culminate in analysis of learning theories related to educational psychology in order to develop a personal educational philosophy. Candidates will engage in four hours of preclinical experiences, which include virtual classroom observations from the perspective of educational psychology and learner development. Cross-cutting themes of technology and diversity are interwoven for further development. This course is designed to be taken after successful completion of the Foundations of Education course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate describes theories of development across the cognitive, linguistic, social, emotional, and physical areas to understand the needs of students at various developmental levels.*
- *The graduate evaluates the influence of students' developmental characteristics on their learning and evaluates performance to inform instructional decisions.*



- *The graduate recommends instructional strategies that will positively impact learning, based on principles of learning theories.*
- *The graduate evaluates classroom practices to determine how theories of child and adolescent psychology, learning, and development are applied in the classroom environment.*
- *The graduate analyzes learning theories to develop a personal educational philosophy.*

## **Schools as Communities of Care**

Schools as Communities of Care is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course introduces candidates to strategies for providing a culturally inclusive learning environment that meets the social and emotional needs of learners while taking into account theories and philosophical perspectives on child and adolescent development and learning. Emphasis is placed on fostering a collaborative relationship with families, caregivers, and community stakeholders, and on leveraging community resources to support each learner's growth and well-being to build a strong foundation for their academic and personal success. Topics addressed include culturally responsive practice, social and emotional learning (SEL), youth mental health, substance abuse, suicide awareness and prevention, abuse within families, and professional responsibilities to ensure student wellbeing. The course will culminate in evidence-based, practical application of strategies that support the whole child in a community of care. Candidates will engage in seven hours of preclinical experiences, include virtual observations of learning environments that involve parents and families in their children's' education and an interview with an educational professional. Cross-cutting themes of technology and diversity are interwoven for further development. This course is designed to be taken after successful completion of the Educational Psychology and Human Development of Children and Adolescents course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate plans for learning environments that meet all students' cultural, social, and emotional learning needs by incorporating knowledge of individual learners, diverse cultures, and communities.*
- *The graduate develops strategies to address the social and emotional learning (SEL) needs of students, including the incorporation of trauma-informed or restorative instructional practices.*
- *The graduate identifies appropriate resources and processes to support the mental health and emotional well-being of students.*
- *The graduate collaborates with families, caretakers, and the larger community to identify partnerships that facilitate learner growth.*
- *The graduate recommends evidence-based strategies that are appropriate to support the social and emotional needs of students grappling with situations affecting their home, school, or community.*

## **Essential Practices for Supporting Diverse Learners**

Essential Practices for Supporting Diverse Learners is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course focuses on inclusive and responsive practices and interventions for meeting the needs of diverse populations of learners, including students with disabilities (INCLUDING DYSLEXIA), English language learners, and gifted and talented students. Candidates will apply practical strategies for differentiating instruction, partnering with parents, implementing a Multi-Tiered Systems of Support (MTSS), and advocating for all students, particularly those impacted by provisions of IDEA and Section 504 of the Rehabilitation Act, for the purpose of creating an accessible, equitable, inclusive, and culturally responsive learning experience. The course will culminate in practical application of evidence-based multi-tiered intervention strategies to support positive behavior and learning in the classroom for diverse learners. Candidates will engage in four hours of preclinical experiences that include a simulated teaching experience in which skills learned can be applied. Cross-cutting themes of technology and diversity are interwoven for further development. This course is designed to be taken after successful completion of the Schools as Communities of Care course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate analyzes the application of policies, practices, and legal requirements to inform teaching practice.*
- *The graduate creates inclusive learning environments featuring multitiered systems of supports to address the needs of all students, including exceptional learners and English learners.*
- *The graduate creates learning experiences that accommodate the needs of students with exceptionalities, including gifted and talented students, in order to facilitate the success of all learners.*

- *The graduate integrates equity pedagogy to address the needs of multicultural learners.*
- *The graduate plans learning experiences that accommodate linguistic diversity to facilitate the success of all learners.*
- *The graduate recommends strategies to engage with students, families, administrators, and other stakeholders in ways that are effective, legal, and ethical.*
- *The graduate analyzes why specific multi-tiered intervention strategies support positive behavior and learning in the classroom.*

## **Creating and Managing Engaging Learning Environments**

Creating and Managing Engaging Learning Environments is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course provides candidates with research-based strategies and approaches to establishing and maintaining a safe and productive learning environment that supports the success and well-being of all P-12 learners. Topics addressed include consistent routines and expectations, student engagement, positive behavior support, motivation and its effect on student achievement, active learning and self-direction, and fostering a sense of community through collaboration. Candidates will design a classroom management plan for their future classroom based on theory and high-leverage practices for meeting the diverse needs of learners in a productive and collaborative learning environment. The course will culminate in evidence-based, practical application of current strategies to motivate and engage students in specific content areas. Candidates will engage in seven hours of preclinical experiences that include both virtual observations of classroom settings and time in a simulated classroom environment where theory can be put into practice. Cross-cutting themes of technology and diversity are interwoven for further development. This course is designed to be taken after successful completion of the Essential Practices for Supporting Diverse Learners course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate establishes norms and routines to create a safe and productive learning environment that encourages positive social interactions, individual and collaborative learning, and appropriate classroom behaviors.*
- *The graduate interacts with each student in a way that builds positive relationships by using knowledge of individual learners, diverse cultures, and communities.*
- *The graduate analyzes the theoretical foundations and application of classroom management strategies, including behavior support and conflict management, to inform teaching practice.*
- *The graduate recommends strategies that are motivating and encourage active engagement from all students.*
- *The graduate applies evidence-based strategies within their content area to motivate and engage students.*

## **Curriculum, Instruction, and Assessment**

Curriculum, Instruction, & Assessment is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course provides candidates with theoretical foundations and strategies for creating engaging and standards-aligned lessons that meet the needs of all learners in the P-12 classroom. This course focuses on the interrelationship between curriculum, instruction, and assessment, with emphasis on the role of assessment and student data in planning, designing, delivering, and modifying instruction in accordance with diverse learner needs. This course will culminate in the application of evidence-based strategies related to the interdependence of and alignment among curriculum, instruction, and assessment in student-centered P-12 teaching and learning. Candidates will engage in three hours of preclinical experiences, which include conducting virtual classroom observations and recording a short teaching segment. Crosscutting themes of technology and diversity are interwoven for continued development. This course is designed to be taken after successful completion of the Creating and Managing Engaging Learning Environments course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate aligns lessons to learning goals by synthesizing knowledge about students and their assessment data.*
- *The graduate analyzes the role of various assessment types in evaluating student learning and planning future instruction.*
- *The graduate implements evidence-based instructional strategies to increase content area learning.*
- *The graduate differentiates instruction to facilitate mastery for all learners.*
- *The graduate incorporates cross-disciplinary instruction, skills, and content into lessons.*

- *The graduate creates standards-based instructional plans based on their state's P–12 standards that incorporate knowledge of learners' developmental needs, prior learning, and community and cultural context.*
- *The graduate analyzes the alignment of curriculum, instruction, and assessment to improve instruction and support learning for all students.*

## **Assessing Student Learning**

Assessing Student Learning is a key component of WGU's Professional Core and is a required course for all Master of Arts in Teaching candidates. This course provides candidates with methods and best practices for using assessment to monitor student progress and to evaluate the effectiveness of instruction. This course focuses on implementing a balanced approach to assessment using multiple assessment types such as formative, summative, standardized, and common assessments. Also covered are data literacy skills for interpreting and analyzing individual learner and classroom data to improve instruction and support academic success for all learners. The course will culminate in evidence-based, practical application of strategies for assessment practices in P-12 schools. Candidates will engage in three hours of preclinical experiences that include virtual classroom observations. Cross-cutting themes of technology and diversity are interwoven for further development. This course is designed to be taken after successful completion of the Curriculum, Instruction, and Assessment course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate plans a progress-monitoring strategy, including formative, summative, and common assessments, that actively engages students in their own learning.*
- *The graduate analyzes assessment results to evaluate student learning and teacher effectiveness.*
- *The graduate makes evidence-based instructional decisions that are informed by student assessment data.*
- *The graduate determines their impact on learners and the broader school community through evaluation of teaching practice.*
- *The graduate evaluates assessment practices to assess students in a valid, reliable, non-biased, and accessible manner.*

## **Using Educational Technology for Teaching and Learning**

Using Educational Technology for Teaching and Learning is a key component of WGU's professional core and is a required course for all Master of Arts in Teaching candidates. This course presents strategies for integrating technology into classroom practices to improve instruction and student learning according to the International Society for Technology in Education (ISTE) standards. Candidates will evaluate digital tools and their potential classroom applications such as enhancing curriculum, enabling communication with students and families, and increasing student engagement. Topics covered include ethics, equity and access to technology, and appropriate use of technology by P–12 students. Assistive technologies to meet the needs of a diverse learner population also will be addressed. The course will culminate in evidence-based, practical application of current standards, strategies, theories, or philosophical perspectives related to the use of technology in teaching and learning. Candidates will engage in three hours of preclinical experience that include virtual observations of classroom practices incorporating technology to support educational goals. Crosscutting themes of technology and diversity are interwoven for further development. This course is designed to be taken after successful completion of the Assessing Student Learning course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate analyzes how research-based applications of technology facilitate student learning.*
- *The graduate evaluates the application of technology in the classroom, including its impact on learning for all students and potential equity or access issues.*
- *The graduate promotes a technology-enabled classroom culture that is equitable, ethical, and socially responsible.*
- *The graduate applies curricular and instructional design principles to create effective digital learning environments.*
- *The graduate recommends technology as an assessment tool to encompass multiple learner needs, provide in the moment feedback, and inform instruction.*
- *The graduate fosters student self-directedness and independent learning through the use of technology.*
- *The graduate applies evidence-based practices to articulate how technology supports teaching and learning in different*

## Effective Teaching Practices

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### 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:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *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 develops effective vocabulary instruction to enhance students' reading comprehension in the content areas.*
- *The graduate integrates knowledge of effective comprehension strategies to help students monitor and improve their own comprehension when reading.*
- *The graduate integrates reading strategies that scaffold instruction for students when reading increasingly complex texts.*
- *The graduate integrates reading assessments to make informed instructional and placement decisions.*

### 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 student reading and writing success in all curriculum areas. This course has no prerequisites.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *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 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 creates authentic learning tasks and activities that provide students with opportunities to demonstrate discipline specific understandings.*
- *The graduate integrates instructional strategies and materials in disciplinary literacy practices to enhance student understanding within the disciplines.*

## Science Education

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### Science, Technology, and Society

Science, Technology, and Society explores the ways in which science influences and is influenced by society and technology. A humanistic and social endeavor, science serves the needs of ever-changing societies by providing methods for observing, questioning, discovering, and communicating information about the physical and natural world. This course prepares educators to explain the nature and history of science, the various applications of science, and the scientific and

engineering processes used to conduct investigations, make decisions, and solve problems. There are no prerequisites for this course.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate analyzes the relationships among themes that appear across multiple scientific ideas.*
- *The graduate analyzes the nature of science, including how science distinguishes itself from other ways of knowing.*
- *The graduate analyzes the historical development of science, including how scientific knowledge evolves.*
- *The graduate analyzes the various ways in which science, technology, and society are interrelated.*
- *The graduate analyzes socially relevant scientific issues to make informed decisions based on data and context.*
- *The graduate analyzes the principles, processes, and assumptions of investigations in science to engage students in the nature of inquiry.*
- *The graduate uses technology tools and mathematics to improve investigations and the communication of results.*
- *The graduate formulates testable hypotheses for scientific investigations.*
- *The graduate conducts investigations in science to solve open-ended problems using appropriate scientific methods.*

## **Science Methods**

Science Methods provides an introduction to science teaching methods for graduate students seeking initial licensure or an additional endorsement in secondary biology, chemistry, geosciences, physics, or middle grades general science. Course content focuses on the design and teaching of standards-based lessons using the three dimensions of science (science and engineering practices, crosscutting concepts, and disciplinary core ideas) and the appropriate integration of technology into those lessons. Students in this course work within their content areas to evaluate, enhance, and plan appropriate science instruction. This course includes laboratory safety training and certification, which includes safe laboratory practices and procedures for science classrooms and the proper use of personal protective equipment. Students seeking initial licensure should complete NHC1: Introduction to Instructional Planning and Presentation before this course. There are no prerequisites for students seeking an endorsement in a new content area.

*This course covers the following competencies:*

- *Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.*
- *The graduate analyzes connections among the three dimensions of science instruction—disciplinary core ideas, crosscutting concepts, and science and engineering practices—to prepare and plan for instruction.*
- *The graduate integrates technology into science activities to support student engagement and content mastery.*
- *The graduate develops assessment strategies that measure three-dimensional science learning to determine the effectiveness of teaching and learning experiences.*
- *The graduate develops lessons that integrate the three dimensions of science with applicable technologies to connect scientific concepts and phenomena.*
- *The graduate develops plans for the use, storage, and maintenance of science materials and protective equipment and for the care of living organisms to comply with district, state, and federal safety, ethical, and legal standards for science teachers.*
- *The graduate establishes an emergency response plan to prepare for potential emergency situations in the science learning environment.*

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## **Field Experience**

### **Preclinical Experiences in Science**

Preclinical Experiences in Science 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 develops a classroom management plan that integrates best practices for engagement and motivation.*
- *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 collaborates with a mentor teacher in the planning and delivery of instruction in a classroom setting.*
- *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 applications of various assessment practices as they relate to student learning and instructional design.*
- *The graduate evaluates various applications of technological integration in support of learning for all students.*
- *The graduate evaluates the theoretical, legal, ethical, and practical applications of teaching students with exceptional learning needs.*
- *The graduate evaluates educational observations and experiences connected to professional practices to support the development of appropriate teaching dispositions and a personal teaching philosophy.*

## **Demonstration Teaching**

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### **Supervised Demonstration Teaching in Science, Observations 1 and 2**

Supervised Demonstration Teaching in Science 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 provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*
- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*
- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*
- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*
- *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 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 effective strategies to manage the delivery of lesson content.*
- *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.*

### **Supervised Demonstration Teaching in Science, Observation 3 and Midterm**

Supervised Demonstration Teaching in Science 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 provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*
- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*
- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*
- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*
- *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 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 effective strategies to manage the delivery of lesson content.*
- *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.*

### **Supervised Demonstration Teaching in Science, Observations 4 and 5**

Supervised Demonstration Teaching in Science 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 provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*
- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*
- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*
- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*
- *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 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 effective strategies to manage the delivery of lesson content.*
- *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.*

### **Supervised Demonstration Teaching in Science, Observation 6 and Final**

Supervised Demonstration Teaching in Science 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 provides developmentally appropriate instruction that supports the cognitive, linguistic, social, emotional, and physical needs of all students.*
- *The graduate establishes a safe and productive learning environment that supports individual learning, collaborations, and positive social interaction.*
- *The graduate integrates effective strategies to manage the resources, students, procedures, and routines of the classroom.*
- *The graduate designs instruction that effectively integrates understanding of subject matter, curriculum goals, cross-disciplinary skills, pedagogy, and students.*
- *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 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 effective strategies to manage the delivery of lesson content.*
- *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.*

## Teacher Performance Assessment in Science

The Teacher Performance Assessment in Science is 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 evaluates the teaching context to accommodate student differences to plan for instruction and assessment.*
- *The graduate plans learning environments that support individual learning, collaboration, and positive social interaction.*
- *The graduate plans comprehensive learning segments of instruction and assessment that align with standards and the needs of students.*
- *The graduate applies instructional strategies that promote learning, engage students, and provide differentiated instruction.*
- *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 teaching experiences including the planning and implementing of curriculum and instruction through ongoing reflection.*

## Professional Portfolio

Professional Portfolio requires candidates to create an online teaching portfolio that demonstrates professional beliefs, growth, and effective teaching practices from the Demonstration Teaching experience. The portfolio includes reflective essays (educational beliefs, professional growth, and collaboration with stakeholders) and professional artifacts (resume and artifacts with commentary on academic language, systems of student support, education technology, and professional communication with families) developed and acquired during Demonstration Teaching.

*This course covers the following competencies:*

- *The graduate recommends improvements for instruction and professional practice through personal reflection.*
- *The graduate integrates technology into classroom learning experiences to enhance student learning and monitor academic progress.*
- *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 integrates a variety of strategies and resources to differentiate instruction and meet the needs of diverse learners.*
- *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 demonstrates the ability to positively impact student learning through work samples, student artifacts, assessment results, and reflection.*
- *The graduate recommends improvements for instruction and professional practice through personal reflection.*
- *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 for effectively collaborating with colleagues, parents, and community*



*professionals to support student development, learning, and well being.*

- *The graduate selects community resources that support students' non-instructional needs in and out of the classroom.*
- *The graduate recommends strategies that support the development of academic language for all students.*
- *The graduate integrates a variety of strategies and resources to differentiate instruction and meet the needs of diverse learners.*
- *The graduate recommends effective strategies to maintain high levels of student engagement.*
- *The graduate recommends best practices for classroom management, effective transitions, and pacing to maximize instructional time.*
- *The graduate develops appropriate plans for professional growth in subject matter knowledge and pedagogical skills, including habits and skills of continual inquiry and learning.*

## Accessibility and Accommodations

Western Governors University is committed to providing equal access to its academic programs to all qualified students. WGU's Accessibility Services team supports this mission by providing support, resources, advocacy, collaboration, and academic accommodations for students with disabilities and other qualifying conditions under the Americans with Disabilities Act (ADA). WGU encourages student to complete the Accommodation Request Form as soon as they become aware of the need for an accommodation. Current and prospective students can reach the Accessibility Services team Monday through Friday 8:00 a.m. to 5:00 p.m. MST at 1-877-HELP-WGU (877-435-7948) x5922 or at ADASupport@wgu.edu.

## 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 requests. 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.

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](mailto: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](mailto: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>.