



Program Guidebook

Bachelor of Arts, Educational Studies in Secondary Earth Science Education

The Bachelor of Arts, Educational Studies in Secondary Earth Science Education (BAESSESE), includes content knowledge related to secondary earth sciences (5-12) teaching. This program consists of online courses which take the learner from general education, through methods of instruction, assessment, and classroom management to science education courses for interacting with secondary grades students. It does not include a supervised teaching practicum in a real classroom and therefore does not meet the requirements for initial teacher licensure. This program is for individuals who, for various reasons, want the academic knowledge that relates to teaching, but who cannot or do not want to participate in a supervised classroom practicum and do not expect to be eligible to teach as a result of completing the program.

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 it 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.

[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 Bachelor of Arts, Educational Studies in Secondary Earth Science Education

Course Description	CUs	Term
Composition: Writing with a Strategy	3	1
The School as a Community of Care	3	1
Introduction to Communication: Connecting with Others	3	1
Integrated Physical Sciences	3	1
Introduction to Biology	3	2
Applied Probability and Statistics	3	2
Composition: Successful Self-Expression	3	2
US History: Stories of American Democracy	3	2
Educational Foundations	2	3
Concepts in Science	2	3
Educational Psychology and Development of Children and Adolescents	4	3
Fundamentals of Diverse Learners	4	3
College Algebra	4	4
Natural Science Lab	2	4
Chemistry with Lab	4	4
Ecology and Environmental Science	3	4
Managing Engaging Learning Environments	3	5
Global Arts and Humanities	3	5
Introduction to Curriculum, Instruction, and Assessment	3	5
General Physics	5	5
Assessing Impact on Student Learning	3	6
Geology I: Physical	4	6
Educational Technology for Teaching and Learning	3	6
Geology II: Earth Systems	4	6
The Ocean Systems	4	7
Science, Technology, and Society	5	7
Astronomy	3	7
Science Methods—Secondary Earth Science	4	8
Secondary Reading Instruction and Interventions	3	8
Secondary Disciplinary Literacy	3	8

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 Bachelor of Arts, Educational Studies in Secondary Earth Science Education

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.

General Education

Composition: Writing with a Strategy

Welcome to Composition: Writing with a Strategy! In this course, you will focus on three main topics: understanding purpose, context, and audience, writing strategies and techniques, and editing and revising. In addition, the first section, will offer review on core elements of the writing process, cross-cultural communication, as well as working with words and common standards and practices.

Each section includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to check your learning, practice, and show how well you understand course content. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to gain proficiency in the seven competencies that will be covered in the final assessment. If you have no prior knowledge or experience, you can expect to spend 30-40 hours on the course content.

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 individual writes with purpose for a given context and target audience.*
- *The individual incorporates writing strategies and techniques for written communication.*
- *The individual constructs a written document with correct format, style, structure, and grammar.*
- *The individual formulates a strategy for editing and revising written text.*
- *The individual composes constructive feedback of written texts.*

Introduction to Communication: Connecting with Others

Welcome to Introduction to Communication: Connecting with Others! It may seem like common knowledge that communication skills are important, and that communicating with others is inescapable in our everyday lives. While this may appear simplistic, the study of communication is actually complex, dynamic, and multifaceted. Strong communication skills are invaluable to strengthening a multitude of aspects of life. Specifically, this course will focus on communication in the professional setting, and present material from multiple vantage points, including communicating with others in a variety of contexts, across situations, and with diverse populations. Upon completion, you will have a deeper understanding of both your own and others' communication behaviors, and a toolbox of effective behaviors to enhance your experience in the workplace.

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 learner implements appropriate communication styles based on audience and setting.*
- *The learner uses communication strategies for managing conflict.*
- *The learner uses communication strategies to influence others.*

Integrated Physical Sciences

This course provides students with an overview of the basic principles and unifying ideas of the physical sciences: physics, chemistry, and earth sciences. Course materials focus on scientific reasoning and practical, everyday applications of physical science concepts to help students integrate conceptual knowledge with practical skills.

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 learner describes the nature and process of science.*
- *The learner examines applications of physics including fundamental concepts such as forces, motion, energy, and waves.*
- *The learner examines applications of key chemistry concepts including the structure of matter and the behavior and conservation of matter in chemical reactions.*
- *The learner describes the underlying organization, interactions, and processes within the Earth system including the Earth's structure and atmosphere, and Earth's interactions within the solar system.*

Applied Probability and Statistics

Applied Probability and Statistics is designed to help students develop competence in the fundamental concepts of basic statistics including: introductory algebra and graphing; descriptive statistics; regression and correlation; and probability. Statistical data and probability are often used in everyday life, science, business, information technology, and educational settings to make informed decisions about the validity of studies and the effect of data on decisions. This course discusses what constitutes sound research design and how to appropriately model phenomena using statistical data. Additionally, the content covers simple probability calculations, based on events that occur in the business and IT industries. No prerequisites are required 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 applies the operations, processes, and procedures of fractions, decimals, and percentages to evaluate quantitative expressions.*
- *The graduate applies the operations, processes, and procedures of basic algebra to evaluate quantitative expressions, and to solve equations and inequalities.*
- *The graduate evaluates categorical and quantitative data pertaining to a single variable using appropriate graphical displays and numerical measures.*
- *The graduate evaluates the relationship between two variables through interpretation of visual displays and numerical measures.*
- *The graduate evaluates the relationship between two quantitative variables through correlation and regression.*
- *The graduate applies principles and methods of probability-based mathematics to explain and solve problems.*

Composition: Successful Self-Expression

Welcome to Composition: Successful Self-Expression! In this course, you will focus on four main topics: professional writing for a cross-cultural audience, narrowing research topics and questions, researching for content to support a topic, and referencing research sources. Each section includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to check your learning, practice, and show how well you understand course content. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to gain proficiency in the seven competencies that will be covered in the final assessment. If you have no prior knowledge or experience, you can expect to spend 30-40 hours on the course content. You will demonstrate competency through a performance assessment. There is no prerequisite for this course and there is no specific technical knowledge needed.

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 learner composes a written message with language appropriate for cross-cultural communication.*
- *The learner writes in a professional manner for a given scenario.*
- *The learner researches valid and reliable sources.*
- *The learner writes a reference list.*
- *The learner incorporates research to support a position or idea.*
- *The learner writes a message using an effective communication approach for a given situation.*

- *The learner incorporates self-expression in written communication.*

US History: Stories of American Democracy

This course presents a broad survey of U.S. history from early colonization to the mid-twentieth century. The course explores how historical events and major themes in American history have affected diverse populations, influenced changes in policy and established the American definition of democracy. This course consists of an introduction and five major sections. Each section includes learning opportunities through reading, images, videos, and other relevant resources. Assessment activities with feedback also provide opportunities to practice and check how well you understand the content. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to, with the goal of demonstrating proficiency in the five competencies covered in the final assessment. If you have no prior knowledge of this material, you can expect to spend 30-40 hours on the course content.

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 learner analyzes secondary sources to understand events and processes in American History.*
- *The learner analyzes primary sources to understand events or processes in American history.*
- *The learner explains the effect of the actions of individuals in U.S. History.*
- *The learner explains the effect of institutions on society.*
- *The learner describes how economic, political, and social factors affect communities*

College Algebra

This course provides further application and analysis of algebraic concepts and functions through mathematical modeling of real-world situations. Topics include: real numbers, algebraic expressions, equations and inequalities, graphs and functions, polynomial and rational functions, exponential and logarithmic functions, and systems of linear equations.

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 classifies and performs operations on real numbers; solves linear equations and inequalities; connects a linear equation to its graph; and identifies a function.*
- *The graduate solves systems of linear equations and their related applications.*
- *The graduate simplifies and factors polynomial expressions, and solves polynomial equations.*
- *The graduate simplifies rational, radical, and quadratic expressions, solves corresponding equations, and extends this knowledge to the study of functions.*
- *The graduate combines functions, finds inverse functions, solves exponential and logarithmic equations and functions.*

Natural Science Lab

This course provides students an introduction to using the scientific method and engaging in scientific research to reach conclusions about the natural world. Students will design and carry out an experiment to investigate a hypothesis by gathering quantitative data. They will also research a specific ecosystem using academic sources and draw conclusions from their findings.

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 evaluates academic sources for their credibility and relevance to a chosen research topic on a natural world phenomenon.*
- *The graduate accurately executes the process of scientific inquiry through experimentation in the natural world.*
- *The graduate draws conclusions based on academic research and scientific inquiry.*

Global Arts and Humanities

This is a Global Arts and Humanities course that contains three modules with corresponding lessons. This course is an

invitation to see the world through the humanities, examine the humanities during the Information Age, and explore the global origins of music—essentially questioning what makes us human, and how people are connected across culture and time. Each module includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to practice and check learning. With no prior knowledge or experience, a learner can expect to spend 30-40 hours on the course content.

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 learner analyzes diverse voices, ideas, perspectives, and cultural interactions through the lens of the humanities.*
- *The learner analyzes the humanities during the Information Age.*
- *The learner analyzes how music shapes and is shaped by diverse cultures and perspectives.*

Professional Core

The School as a Community of Care

The School as a Community of Care is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. This course prepares candidates to meet the social and emotional needs of learners, taking into account theories and philosophical perspectives on child and adolescent development and learning. Candidates learn to effectively collaborate with parents, families, caregivers, and other community stakeholders in each child's education, to build a strong foundation for academic and personal success. Emphasis is placed on family engagement as candidates gain knowledge of individual, cultural, and community assets that can be used to facilitate learner growth and development, as well as understand mental health and emotional differences among learners that may necessitate leveraging additional resources to support students' wellbeing. Issues of youth mental health, substance abuse, suicide awareness and prevention, and abuse within families will be addressed as will the importance of parent involvement. Candidates will engage in seven hours of preclinical experiences, which include visual observations of learning environments that involve parents and families in their children's education while supporting the social and emotional learning (SEL) needs of learners and an interview with an educational professional to explore topics related to parent involvement, youth mental health issues, and professional responsibilities to ensure student wellbeing. Additionally, crosscutting themes of technology and diversity are interwoven for further development.

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.*

Educational Foundations

Educational Foundations is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. The course provides candidates with early classroom experience where they observe multiple school settings at three different levels of schooling and interview an educator to learn how state standards and various legal and ethical issues affect classrooms today. The course also provides candidates with opportunities to gain foundational knowledge about what it means to be a teacher in the current educational context while exploring their future role within the larger landscape of historical and cultural influences. This course ensures candidates have a firm grasp on important issues affecting educators including state standards-based curriculum, legal and ethical requirements affecting educational opportunities, and professionalism, preparing them for subsequent coursework within the Professional Core and their content area major courses. Five preclinical hours are interwoven throughout this course, and 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.*

Educational Psychology and Development of Children and Adolescents

Educational Psychology and Development of Children and Adolescents is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. This course prepares candidates to support classroom practices grounded in research-validated principles from the areas of educational psychology and child/adolescent development. Candidates will be introduced to learning theories that equip them with the knowledge and skills necessary to support the diverse populations of students with whom they will interact. This course addresses theories of human development, spanning early childhood through adolescence, and candidates completing this course will be able to explain and analyze the guiding perspectives on linguistic, physical, cognitive, and social development. This course will also cover appropriate instructional and assessment strategies to support student learning and development. Candidates will engage in four hours of virtual classroom observations related to issues in educational psychology and learner development. Cross-cutting themes of technology and diversity are interwoven for further development.

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.*

Fundamentals of Diverse Learners

Fundamentals of Diverse Learners is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. This course prepares candidates to consider and address the wide range of learning needs in the classrooms of today. This course teaches candidates to identify and support the needs of diverse populations of learners, including, for example, students with disabilities (including Dyslexia), students who are English language learners, and students who are gifted and talented. Practical strategies for differentiating instruction while creating a safe, inclusive, and culturally responsive learning environment are explored. This course helps candidates develop skills for partnering with parents and advocating for all students, particularly those impacted by provisions of IDEA and Section 504 of the Rehabilitation Act. Multitiered systems of support are addressed to prepare candidates for their future classrooms as they seek to select appropriate instructional practices and interventions to best serve their students. 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 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.*

Managing Engaging Learning Environments

Managing Engaging Learning Environments is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. This course prepares candidates to establish and contribute to safe and productive learning environments that support the success of all learners by ensuring student engagement and motivation for learning. Candidates will learn strategies, such as incorporating consistent routines and expectations, to provide positive behavior supports, increase learner motivation, promote active learning and self-direction, and ensure a safe and productive classroom setting that fosters a sense of community through collaborative educational practices. The course will culminate in evidence-based, practical application of current strategies, theories, or philosophical perspectives related to motivating and engaging all students in a learning community. 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 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.*

Introduction to Curriculum, Instruction, and Assessment

Introduction to Curriculum, Instruction, and Assessment is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. This course provides candidates with the knowledge and skills necessary to create engaging and standards-aligned lessons that meet the needs of all learners. Candidates will learn to analyze learner needs based on a variety of inputs, including their state P–12 standards, assessment results, and knowledge of learner differences. This course will help candidates design, deliver, and modify instruction in accordance to needs and educational requirements. Candidates will engage in three hours of preclinical experiences that include virtual classroom observations. They also will record a short teaching segment, allowing for authentic teaching experience. Cross-cutting themes of technology and diversity are interwoven for continued development.

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.*

Assessing Impact on Student Learning

Assessing Impact on Student Learning is a key component of WGU's Professional Core and is a required course for all initial licensure candidates. This course equips candidates to evaluate student learning and their own professional practice, ensuring candidates are prepared to ensure all learners' success. In this course, candidates learn multiple methods of assessment to ensure they are able to implement a balanced approach to assessment while monitoring their students' progress. Assessments types such as formative, summative, standardized, and common assessments are addressed so candidates understand their purposes and can apply them within the context of a lesson to determine impact on learning. Data literacy skills are taught to ensure candidates interpret and analyze individual and classroom data and apply their

knowledge in ways that support academic success. 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 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.*

Educational Technology for Teaching and Learning

Educational Technology for Teaching and Learning is a key component of WGU's professional core and is a required course for all initial licensure candidates. This course prepares candidates to incorporate technology into their classroom practices in ways that improve teaching and learning. The ISTE standards will form the basis for their practice. The material will teach candidates to critically evaluate software and hardware options that may positively impact the classroom environment, while also increasing their awareness of ethical usage and considerations related to equity, 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 taught in this course. Candidates will engage in three hours of preclinical experience that include virtual observations of classroom practices incorporating technology to support educational goals. Cross-cutting themes of technology and diversity are interwoven for further development.

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.*

General Science Content

Introduction to Biology

This course is a foundational introduction to the biological sciences. The overarching theories of life from biological research are explored as well as the fundamental concepts and principles of the study of living organisms and their interaction with the environment. Key concepts include how living organisms use and produce energy; how life grows, develops, and reproduces; how life responds to the environment to maintain internal stability; and how life evolves and adapts to the environment.

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 characteristics and classifications of living organisms.*
- *The graduate analyzes the basic chemical composition of cells and the basic processes that happen at the cellular level.*
- *The graduate analyzes different types of cells based on their structures and biological functions.*
- *The graduate analyzes the biological basis for and patterns of heredity and gene expression.*

- *The graduate analyzes inter-dependencies of organisms and their environments.*

Ecology and Environmental Science

Ecology and Environmental Science is an introductory course for undergraduate students seeking initial licensure or endorsement in secondary or middle grade science education. The course explores the relationships between organisms and their environment, including population ecology, communities, adaptations, distributions, interactions, and the environmental factors controlling these relationships. 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 examines ecosystems to analyze the relationship between populations and the environment.*
- *The graduate examines the flow of energy in an ecosystem to assess how changes in that flow affect biodiversity.*
- *The graduate analyzes biogeochemical cycles to explain the importance of these cycles to global processes.*
- *The graduate researches environmental challenges to discuss potential solutions.*
- *The graduate assesses the challenges associated with resource management in order to compare potential sustainable solutions.*

General Physics

This course provides a broad overview of the principles of mechanics, thermodynamics, wave motion, modern physics, and electricity and magnetism. and invites students to apply them by solving problems, performing labs, and reflecting on concepts and ideas.

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 has a broad understanding of energy, including mechanics, heat, and electricity and magnetism.*
- *The graduate has a broad understanding of wave motion and atomic nuclear physics.*

Geology I: Physical

Geology I: Physical provides undergraduate students seeking initial licensure or endorsement in secondary science education with an introduction to minerals and rocks, the physical features of the Earth, and the internal and surface processes that shape those features. 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 traces Western history of Earth sciences to discuss key concepts and famous scientists in a cultural context.*
- *The graduate analyzes composition, location, movement, and physical evidence of tectonic plates to distinguish landforms and geologic features.*
- *The graduate analyzes minerals and rocks for the purpose of identification and classification.*
- *The graduate examines Earth's internal processes to discuss Earth's magnetic field, convection currents in the mantle, and plate tectonic activity.*
- *The graduate examines weathering, erosion, and deposition of sediments by gravity, wind, water, and ice to describe landform and geologic features.*
- *The graduate analyzes topographical and geologic maps to deduce landform and geologic features.*
- *The graduate examines solar system objects, including composition, properties, location, and origin, to determine Earth's evolution within the solar system.*

Science

Concepts in Science

Concepts in Science for undergraduates provides students seeking a bachelor's degree and initial teacher licensure in science education with an introduction to essential science themes present within and across all science disciplines, including chemistry, physics, biology, and the geosciences. These themes include comprehending the magnitude of the physical and natural world, analyzing and converting measurements, understanding the basic nature and behavior of matter and energy, examining atomic structure, identifying and naming basic types of chemical bonds, and analyzing and interpreting scientific data. Concepts in Science provides a solid foundation for future, in-depth scientific studies and should be taken prior to any other science content course. 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 applies principles of measurement to solve scientific problems.*
- *The graduate explains how various forms of matter and energy respond to physical and chemical changes to understand how matter and energy flow within and among systems.*
- *The graduate determines the composition of atoms and compounds to understand the properties of matter.*
- *The graduate analyzes numeric data to identify patterns and relationships.*

Chemistry Content

Chemistry with Lab

Chemistry with Lab for undergraduates provides students seeking initial teacher licensure in middle grades science or secondary physics, biological science, or earth science with an introduction to the field of chemistry, the branch of science that studies the composition, structure, properties, and behavior of matter. Designed for those not majoring in chemistry education, this course highlights how the topics covered can be applied within various branches of science. This course provides students with opportunities to examine the electronic structure of atoms, study periodic trends, name chemical compounds, write chemical formulas, determine the structure of molecules, balance chemical reactions, and discover the changing states of matter. Laboratory experiences facilitate the study of matter and the application of laboratory safety and maintenance procedures. Concepts in Science for undergraduates is a prerequisite 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 explains how chemistry is applied within other sciences to understand its relevance within the physical and natural world.*
- *The graduate conducts safe and effective investigations to test hypotheses and draw conclusions.*
- *The graduate determines the electronic structure of atoms and periodic trends to compare the properties of various substances.*
- *The graduate names basic compounds, using the periodic table and IUPAC rules, to identify their composition.*
- *The graduate explains how chemical bonds and electron orientation impact the structures and behavior of molecules to understand the composition of matter.*
- *The graduate balances chemical equations to follow the Law of Conservation of Matter.*
- *The graduate determines quantities of heat released or absorbed during chemical reactions to examine relationships between heat and other forms of energy.*
- *The graduate explains how matter changes from one state to another to determine the causes and effects of such transformations.*

Geosciences Content

Geology II: Earth Systems

Geology II: Earth Systems provides undergraduate students seeking licensure or endorsement in secondary science education with an examination of the geosphere, atmosphere, hydrosphere, biosphere, and the dynamic equilibrium of these systems over geologic time. This course also examines the history of Earth and its life-forms, with an emphasis in meteorology. Geology I: Physical is a prerequisite 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 maps the structure and function of Earth's geosphere for soil utility in the environment.*
- *The graduate examines the structure and composition of Earth's atmosphere to distinguish its current atmosphere from historical and other planetary atmospheres.*
- *The graduate evaluates physical meteorological principles and processes to predict weather patterns and the movement of air masses.*
- *The graduate analyzes various factors and influences on climate to anticipate long-term effects.*
- *The graduate examines the structure and function of Earth's surface water, ice, groundwater, and oceans to explain global water management.*
- *The graduate discusses Earth's history and life-forms to trace physical and biological evolutionary processes on this planet.*
- *The graduate analyzes how Earth's systems (i.e., biosphere, geosphere, atmosphere, and hydrosphere) interface and evolve over geologic time to teach biologic, geologic, atmospheric, meteorologic, and hydrologic interaction.*

The Ocean Systems

In this course, learners investigate the complex ocean system by looking at the way its components—atmosphere, biosphere, geosphere, and hydrosphere—interact. Specific topics include: origins of Earth's oceans and the early history of life; physical characteristics and geologic processes of the ocean floor; chemistry of the water molecule; energy flow between air and water, and how ocean surface currents and deep circulation patterns affect weather and climate; marine biology and why ecosystems are an integral part of the ocean system; the effects of human activity; and the role of professional educators in teaching about ocean systems.

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 demonstrates knowledge of oceans, their formation, and the interconnections between ocean systems, the atmosphere, the biosphere, and the geosphere.*
- *The graduate analyzes how properties of seawater affect the ocean systems.*
- *The graduate analyzes ocean currents and how they influence weather and climate.*
- *The graduate analyzes the interrelationships of life forms, natural systems, and cycles within the ocean environment.*
- *The graduate utilizes knowledge of ocean systems, environmental challenges, oceanographic and interdisciplinary methods, and pedagogical techniques to effectively teach others about the ocean systems.*

Astronomy

Astronomy provides undergraduate students seeking initial licensure or endorsement in secondary or middle grade science education with essential knowledge of astronomy. It explores Western history and basic physics of astronomy, phases of the moon and seasons, composition and properties of solar system bodies, stellar evolution and remnants, properties and scale of objects and distances within the universe, and introductory cosmology. General Physics is a prerequisite 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 traces Western history of astronomy to place key concepts and famous scientists in cultural context.*
- *The graduate applies tools and techniques necessary to study astronomical objects and events.*
- *The graduate evaluates composition and structure of our solar system to describe Earth's place and evolution.*
- *The graduate discusses classification and life cycle of stars, such as our sun and its fate, to explain the diversity of celestial objects, including stellar remnants.*
- *The graduate critiques the structure, composition, and classification of the Milky Way and other galaxies as well as concepts of cosmology and the Doppler effect of light to explain the physical evolution of the universe.*

Science, Technology, and Society

Science, Technology, and Society explores the ways in which science influences and is influenced by society and technology. Science is a humanistic and social endeavor and 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.*

Education

Science Methods—Secondary Earth Science

Science Methods—Secondary Earth Science provides an introduction to teaching methods specific to science for undergraduate students seeking initial licensure or endorsement in secondary earth 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. A prerequisite for this course is Curriculum, Instruction, and Assessment.

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.*

Pedagogy

Secondary Reading Instruction and Interventions

Secondary Reading Instruction and Interventions explores the comprehensive, student-centered response to intervention (RTI) 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 is designed to be taken after successful completion of the Introduction to Curriculum, Instruction, and Assessment course OR Introduction to Instructional Planning and Presentation AND Instructional Planning and Presentation in Special Education.

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. The course 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:

- *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.*

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. 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>.