This course of study outlines the sequence of learning activities to help you develop competence in the subject area of Life Science. Your competence will be assessed as you complete the objective exam (SLC4/5) and a series of performance tasks (SLA4/5). This course of study may take up to 15 weeks to complete depending on your educational background, experience with the subject matter, and hours that you are able to dedicate to your studies. Consult with your mentor if you wish to accelerate through this course of study.

Introduction

Welcome to the exciting topic of Life Science, which involves the study of all living things! Life Science covers a broad range of topics, from the chemical processes that occur inside a cell's organelles to the climates of various biomes. As a science teacher, you will want to convey the exciting careers related to Life Science to your students. Understanding how cells function helps researchers in the biotechnology field create better medicines. Understanding how our body functions helps us make better choices to stay healthy. Understanding the effects of human activities on the environment can help us make wiser choices to protect the planet. Share your excitement about science with your students by relating the topics to their lives, conducting hands-on activities, and developing their inquiry skills.

Life Science covers a vast amount of material. The four main topics include cellular biology, evolution, organisms, and ecology. The topics are chunked into a manageable set of weekly activities to complete. Be sure to check your understanding each week. This practice will help you build on your knowledge. Your brain needs time to process the material, so the best practice is to complete 1 or 2 activities each day, with an occasional day off from studying. Model the behaviors you would want your students to practice when learning new material.

Typically, people who choose teaching science as a career have a natural curiosity in the world around them. During this assessment, you will be learning more about living things. You already have a base knowledge from your previous schooling, reading, watching shows, and interacting with the world. While working through this document, connect your new knowledge with your current base. Sometimes, new knowledge contradicts your current understanding. You will need to pay close attention during these times, so that you can properly reframe your understanding. Your goal is to become the best teacher you can be. By improving your background in the Life Sciences, you can share the relationships between the science disciplines with your students. This course of study covers the following competencies:

- Competency: History & Philosophy of Science
  The graduate has a broad understanding of the important issues and concepts in the history and philosophy of science.

- Competency: Molecular & Cellular Biology
  The graduate has a broad understanding of the important concepts in molecular & cellular biology.

- Competency: Biology of Organisms
  The graduate has a broad understanding of the important concepts related to the biology of organisms.

- Competency: Ecology
  The graduate has a broad understanding of important concepts of ecology.

- Competency: Evolution
  The graduate has a broad understanding of evolution and the history of life on earth.

Learning Resources:
WGU Statement of Teaching Dispositions

WGU supports the development and demonstration of professional teaching dispositions throughout the course of its Teachers College (TC) licensure programs. All TC students and faculty will demonstrate the following dispositions described in the Teachers College's conceptual framework and code of ethics:

- Competent and caring
- Respectful and embracing of diversity
- Reflective practitioners
- Equitable and fair
- Professional practice consistent with the belief that all students can learn
- Collaborative professionals
- Professional leaders and change agents

Please review the "Teacher's College Code of Ethics" found in the WGU Student Handbook (http://kb.wgu.edu/article.asp?article=1489&p=3). Practice the dispositions above while working through this course of study. Reflect on your learning and believe that you will learn the material needed to pass your assessment(s). Care about your education by scheduling time each week to devote to your studies. Collaborate with other teachers by interacting in the message boards, and be a leader of change by making suggestions to improve this learning document.
Preparing for Success

To successfully complete SLA and SLC, you need the appropriate resources to help with your learning. You should also prepare a calendar to schedule times devoted to your studies. Share your calendar with family and friends so they are aware of your obligations.

Topics

Acquire Learning Resources

Arrange to obtain the learning resources listed below so there will be no delays in your studies. These items are essential for you, as this document will guide you week by week in the use of these materials. Some of these items must be shipped to you, so be sure that your mailing address information is current. If you click your name on your AAP, you can check your contact information.

Resources

Order the Main Biology Textbook


This commonly used college level Biology textbook also includes a CD and on-line access to additional resources which will help with your learning. The textbook’s website includes quizzes. Each section and chapter of the textbook has questions at the end. Use these to check your understanding as you progress through the material.

The WGU Bookstore has this book available for immediate purchase and delivery. You may shop at other online bookstores, but be sure to order early and use the correct ISBN to get the correct edition.

Order a Workbook to Help with Chemistry Concepts


There are many biochemical processes which occur inside living organisms. This workbook uses a step-by-step approach to help you learn concepts related to basic chemistry so that you better understand the processes which occur inside living organisms.
The WGU Bookstore has this workbook available for immediate purchase and delivery. You may shop at other online bookstores, but be sure to order early and use the correct ISBN to get the correct edition.

**Enroll in Thinkwell's Biology ONLINE**
URL: [http://www.thinkwell.com](http://www.thinkwell.com)

This web-based resource includes multimedia video lectures, review notes, interactive animations, and sample exercises. Enroll in this resource from the "Learning Resources" tab. You will receive an orientation e-mail within 24 to 48 hours from the time your enrollment is approved. This e-mail will contain your log-in information and instructions for the Thinkwell site. If you do not redeem the user code found in this e-mail, you will not be able to see this course as an option (even if you already have a Thinkwell account).

**Enroll in Biology Labs Online**
This web-based resource allows you to learn using inquiry-based biology simulations and sample exercises. This is enrolled through the Learning Resources tab for SLA within your AAP. You will receive an email with directions on accessing this resource on-line. Your mentor will need to approve this.

**Science Methods LabPaq**
URL: LabPaq Liability Release Form
[https://web5.wgu.edu/aap/content/labpaq_sciencemethods.pdf](https://web5.wgu.edu/aap/content/labpaq_sciencemethods.pdf)

The LabPaq self-contained laboratory kit includes a lab manual along with the science equipment, specimens, supplies, and chemicals necessary to complete college laboratory experiments at home. The experiments reinforce science content and teach laboratory techniques.

Note: If you have already ordered this learning resource for another course, do not order it again. This resource is only available to students in a program with a version of 200810 or newer. These programs include a required one-time lab fee payment.

This resource is ordered by submitting the LabPaq Liability Release Form. Follow the directions at the top of the form to receive this resource. Fax, mail, or, preferably, attach this form to an e-mail and send to learning@wgu.edu. They will process your lab order and your materials will ship within five to seven business days. Please check your package as soon as it arrives. If there are any missing or damaged items, you will need to notify the Learning Resources Department right away. Two weeks after shipment, Hands-On Labs will be unable to make exchanges or supply replacements for items.

**Start a Science Notebook**
As you engage in the activities within this course of study, you will be answering questions, completing exercises, sketching out concepts, and so forth. You can take these notes online through the web-enabled COS or using a paper or electronic journal. A notebook or study journal makes your learning more active. It also provides an excellent source of important materials to
review prior to demonstrating your competencies through the assessment. While an electronic version allows you to insert information more easily, many students prefer the convenience of a paper notebook.

**AMNH Seminar (Optional)**

**URLs:**

AMNH Calendar [http://www.amnh.org/learn/calendar](http://www.amnh.org/learn/calendar)
AMNH-WGU FAQ [https://web5.wgu.edu/aap/content/amnh%20wgu%20faq.pdf](https://web5.wgu.edu/aap/content/amnh%20wgu%20faq.pdf)

These online seminars offered by the American Museum of Natural History (AMNH) use multimedia and discussions to connect teachers and future teachers from around the world to cutting-edge research, classroom resources, and each other. Participating in the seminars develops your understanding of the content, models an appropriate teaching technique, and exposes you to an array of resources that can be used in your classroom or to help with lesson planning. While this is an optional learning resource, we strongly encourage you to take advantage of this opportunity. These seminars, which are typically around $400, are covered as part of your WGU tuition.

There are three seminars related to these assessments: "Genetics, Genomics, Genethics", "Evolution" and "Diversity of Fishes". Each six-week seminar requires about 8 hours per week of your time. The seminars have definite start and stop times, so, review the AMNH Calendar to determine when the course is offered and consult your mentor to coordinate this seminar into your schedule. Discuss the AMNH-WGU FAQ with your mentor to better understand how to successfully use the AMNH course as a WGU learning resource.

Enroll in this resource from the "Learning Resources" tab. Once your mentor approves your enrollment, you will be sent a confirmation email. Please check your email regularly for a registration email directly from AMNH. This message will contain the information you will need to access this on-line seminar.

**Acquire a Graphing Calculator**

The assessments associated with this course of study do not require a calculator; however, calculators are permissible on all science assessments and will help you as you navigate through this course of study. Acquire a graphing calculator and familiarize yourself with how to use it. Refer to the Science Calculator Guidelines for details regarding acceptable calculators.

**Participate on the Message Board**

The Message Boards are an important part of the WGU experience. In the right-hand navigation portion of the course of study screen, there is a Message Board area. Throughout your studies, you will want to follow the questions, observations, and responses of other students and the expert advice of the course mentor. If you have questions of your own do not hesitate to use this resource to get those answered as you develop your competencies. Please take the time to now to ask a question about this course. If you don’t have a question, introduce yourself to the course mentor and other students currently working through this course of study.
The Nature of Science

It is important to have an understanding of the nature of science before studying the actual life science content. As a science teacher, you should help students appreciate the nature of science.

Topics

The Nature of Science

The National Science Teachers Association (NSTA) is an organization, based on membership, which holds conferences, publishes literature, and works with teachers from kindergarten through college in an attempt to improve science education. If you are not already a member, I would encourage you to become one. State and national standards in science are based on NSTA’s positions. After completing this topic, you will be able to discuss science subjects which span all science disciplines. How is science different than other subjects? Science involves the use of tools to investigate the world around us. After completing this topic, you will also be familiar with the Science Methods Lab Kit.

Resources

NSTA's Position on the Nature of Science
URL: http://www.nsta.org/about/positions/natureofscience.aspx

Science has unique attributes, different than other subject areas. Read about NSTA’s position by following the link above. In your lab notebook, write down a summary of NSTA’s position on the nature of science.

NSES Standard on the History and Nature of Science
URL: http://www.nap.edu/openbook.php?record_id=4962&page=200

The National Science Education Standards (NSES) were produced by the National Research Council. NSTA supports the Standards and has been engaging in an effort to implement the Standards across the country. In your lab notebook, write down a summary of how science is a human endeavor and how science distinguishes itself from other bodies of knowledge.

Understanding the Nature of Science

While investigating the world around us, scientists evaluate data and formulate reasonable explanations. Read Section 1.5 (pages 19-26) in the Biology textbook. In your lab notebook, write down explanations of the following: inductive reasoning, hypothesis, deductive reasoning, scientific inquiry, and theory. Add to your notes about how science is a human endeavor.

Scientific Inquiry
URL: http://www.nsta.org/about/positions/inquiry.aspx
There is a strong misconception that there exists a single series of steps call "the scientific method" that is used by all scientists. In reality, scientists use many different strategies and methods to solve problems and add to the body of scientific knowledge.

Follow the link above to learn about NSTA's position. In your lab notebook, write down NSTA's position on scientific inquiry after reviewing the website provided. Section 1.5 in the Biology textbook described scientific inquiry and the myth of the scientific method.

**Introduction to the Science Methods LabPaq**

You will be using the supplies within the LabPaq to apply your understanding of science concepts. Read pages 1-11 of the Lab Manual about using this kit; pages 12-16 about presenting lab information; and pages 17-29 about equipment and lab techniques. While completing the labs, reference these pages to learn the proper technique for using all supplies.

**Scientific Writing**

Written records are a crucial part of the science discipline. They help scientists recall and share the details of their experiments. The style used in writing lab reports or scientific papers is different than less formal writing. Make sure you understand the difference between lab notes and a lab report. Pages 12-16 of the Lab Manual review this information.

Here are a few helpful hints on scientific writing style:

Be clear, concise, and complete

Include enough detail that someone else with similar skills could duplicate the results

Use a standard format

Use a passive voice (i.e. "The flask was filled," rather than "I filled the flask.")

Use proper verb tense (i.e. results that are still true today should be in the present tense)

Scientific names should be italicized

Data is plural for datum

Spectra is plural for spectrum

Species is singular and plural

Numbers greater than ten or associated with measurements should be written as numerals

Numbers ten or less or that begin a sentence should be spelled

Numbers associated with measurements should not start a sentence

Metric measurements should be abbreviated without periods (i.e. mm)
Scientific Method Lab
Complete "Experiment 1: The Scientific Method" in the Science Methods LabPaq. After completing the lab, send your lab report to the course mentor to receive feedback.

Measurement

All measurements are estimates because the measurement tool has limitations. This is important to understand and is related to the topic of significant figures. After completing this topic, you will have practiced calculating the error for various tools. Why is possible error important to consider in science experiments?

Resources

The Metric System
URL:http://www.nsta.org/about/positions/metric.aspx

Review this website for a description of the NSTA position on the metric system. Units are crucial during science experiments. NASA lost $125 million Mars orbiter because measurement units were not consistent (http://www.cnn.com/TECH/space/9909/30/mars.metric.02/). When writing down numbers, always include the units.

Measurement Lab
Complete "Experiment 2: Measurement: Length, Mass, Volume, Density, & Time" in the Science Methods LabPaq. After completing the lab, send your lab report to the course mentor to receive feedback.

Note: Experiment 3 describes how to calculate percent error.

Experimental Error Lab
Complete "Experiment 3: Experimental Errors and Uncertainty" in the Science Methods LabPaq. After completing the lab, send your lab report to the course mentor to receive feedback.
Introduction to Chemistry

You can think of biology as an application of chemistry. You should understand how atoms are arranged to make up the molecules found in living matter. The physical shape of a biological molecule is an important aspect of its function.

Topics

Macromolecules

Atoms of C, H and O can be bonded to create a slippery lipid, or bonded a different way to create sweet sugar. How atoms are bonded together determines a molecule’s characteristics. There are four main classes of large biological molecules. When you have completed this topic, you will be able to describe the structure and function of the four main classes of macromolecules. This starts the section titled "Molecular & Cellular Biology" in Thinkwell. How do atoms bond together to create complex biological molecules?

Resources

Atomic Structure
Complete Chapters 1-3 "Atomic Structure", "Chemical Symbols", "Atoms and Molecules" of the An Introduction to Chemistry for Biology Students workbook. This will provide you with a good review of bio-chemistry. Draw examples of chemical bonds in your lab notebook. Can you draw a water molecule showing the sharing of electrons?

Atoms and Bonding
Complete the section called "Atoms and Bonding" in Thinkwell Biology. Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed. Check that your water molecule drawing is correct.

Complete Chapter 8 "The Covalent Bond" and Chapter 9 "Polar and Nonpolar Covalent Bonds" of the An Introduction to Chemistry for Biology Students workbook.

The Chemical Context of Life
Read Chapter 2 of the Biology textbook. The goal is to be more familiar with the few elements found in living things, to reinforce the concept of chemical bonding between atoms, and to appreciate that molecules have a 3-D shape. The physical shape of a biological molecule is an important aspect of its function.

Carbon and the Molecular Diversity of Life
Read Chapter 4 of the Biology textbook. Carbon is the basis of most biological molecules. The goal is to understand the bonding patterns of carbon. In your notebook, draw the carbon atom as well as various molecules formed with carbon skeletons.
**Molecular Structure**

The bonding characteristics of carbon atoms result in many biological molecules (polysaccharides, nucleic acids, proteins, and lipids).

Read Chapter 5 of the Biology textbook. Make a chart of Biological Molecules (e.g. simple and complex hydrocarbons, macromolecules such as polysaccharides, nucleic acids (DNA, RNA), proteins, starch, and lipids) with four columns. Name of Molecule in the first column, Structure in the second column, and Biological Function in the third column. In the fourth column, write any interesting information that will help you remember the properties of the molecule. Notice that the physical shape of the molecule is related to its function.


**DNA**

You were just studying macromolecules. Let's now focus on one particular example, DNA. The "NA" stands for nucleic acid. DNA holds the code for making proteins. In eukaryotic cells, DNA is located in the nucleus. When you have completed this topic, you will be able to explain DNA's structure and how it replicates. How is DNA's repetitive structure replicated?

**Resources**

**Structure and Location of DNA**

Complete Biology Thinkwell section "DNA Structure Revealed." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed. Sections 5.5 and 16.1 of the Biology textbook also review this information. In your notebook, draw a diagram of DNA's structure.

**Replication of DNA**

Complete Biology Thinkwell sections "Introduction to DNA Replication", "Events of DNA Replication." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

View the animation of DNA replication within Thinkwell by clicking on "Animations" from left hand column and then choosing "DNA Replication."

Section 16.2 of the Biology textbook also reviews this information. In your notebook, draw a storyboard showing the steps in replication and the structure of DNA.
Cellular Activities

Biology is the study of life, and all living organisms are made of cells. During this week, you will learn about the structure of cells, and the many activities which occur in and around cells, allowing life to exist.

Topics

Cellular Processes

DNA is found inside the cells. Lipids are found within cell membranes. Carbohydrates act as surface markers on the cell's membrane. Channels within the cell's membrane are made of proteins and help transport large molecules into the cell. Work through the activities below to understand the various types of cells and the processes that occur in cells. What are the various cell type's similarities and differences?

Resources

Eukaryotic vs. Prokaryotic Cells
Read Chapter 6 of the Biology textbook. Make a chart with one column labeled Eukaryotic and the other Prokaryotic cells. As you read through the chapter pages on these two types of cells, list and briefly describe parts of the cell that should be included under either or both of the two cell types.

Complete the Biology Thinkwell section "An Introduction to Cell Biology." Be sure to take the quiz after each step to check your understanding. Check your notes for accuracy.

Plant vs. Animal Cells
Review Chapter 6 of the Biology textbook. Make a Venn diagram depicting the similarities and differences between these cells.

Complete the Biology Thinkwell sections "The Cytoskeleton" and "Membrane-Bound Organelles" Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook describing the functions of the important organelles. The various organelles work together to meet the needs of the cell.

Bacteria Cells vs. Viruses
Complete the Biology Thinkwell section "Viruses and Prions." Be sure to take the quiz after each step to check your understanding. Write down the differences between bacteria cells (prokaryotes) and viruses.

The Basics of Osmosis and Diffusion
Work through Chapter 6 of the An Introduction to Chemistry for Biology Students workbook. Write notes in your lab notebook as needed.
**Cell Transport**
Complete the Biology Thinkwell section "Cell Transport." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

**Membrane Structure and Function**
Read Chapter 7 of the Biology textbook. Your goal is to describe the processes by which cells maintain homeostasis and exchange nutrients and waste with their environments. Write notes in your lab notebook as needed.
Cellular Respiration and Photosynthesis

After working through this section, you should be able to describe the flow of energy through the processes aerobic and anaerobic respiration, and photosynthesis.

Topics

Cellular Biochemical Reactions

Many reactions occur in the mitochondria in the process of making ATP. Remember, prokaryotes do not have mitochondria, so these cells make ATP in the cytoplasm. When you have completed this topic, you will be able to describe the flow of energy through photosynthesis and respiration, as well as the role enzymes during these reactions. How do plants makes sugar, and how is sugar used within a cell?

Resources

Enzyme Function
Complete the Biology Thinkwell section "Enzymes." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed. In your notebook, make a series of drawings that show the basic action of enzymes as you work through this information.

Work through Chapter 17 "Enzymes" of the An Introduction to Chemistry for Biology Students workbook to check your understanding.

The Role of Enzymes
Read Sections 8.4 and 8.5 of the Biology textbook. Your goal is to understand how enzymes speed up reactions and how they are used to regulate metabolism. In organisms, the exergonic reaction of ATP to ADP + P is paired with an endergonic reaction.

Experimenting with Enzymes
Use the Enzyme Lab from Biology Labs On-Line by Pearson to practice what you have learned.

An Introduction to Respiration
Complete the Biology Thinkwell section "An Introduction to Respiration." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

Cellular Respiration
Read Chapter 9 of the Biology textbook. Your goal is to understand the main steps to harvesting usable energy from glucose and where these steps occur in the cell. In your notebook, describe the reactants and products of glycolysis, the citric acid cycle, and oxidative phosphorylation. Which of these require oxygen? Where do these reactions occur in the cell?
Work through Chapter 19 "Biological Oxidation" of the An Introduction to Chemistry for Biology Students workbook to check your understanding.

**Experimenting with Mitochondria**
Use the Mitochondria Lab from Biology Labs On-Line by Pearson to practice what you have learned.

**Fermentation**
Review Chapter 9 of the Biology textbook. Your goal is to describe this anaerobic process of producing ATP. During anaerobic glycolysis, sugar is broken down into pyruvate molecules within the cytoplasm. Yeast cells can anaerobically convert pyruvate into ethanol and carbon dioxide to produce more ATP. When your muscle cells need ATP when no oxygen is present, they can convert pyruvate into lactic acid to make more ATP. Explain to a peer the flow of energy through anaerobic respiration.

**An Introduction to Photosynthesis**
Complete the Biology Thinkwell sections "Discovering Photosynthesis" and "Adaptations for Photosynthesis." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

Work through Chapter 20 "Photosynthesis" of the An Introduction to Chemistry for Biology Students workbook to check your understanding.

**Photosynthesis**
Read Chapter 10 of the Biology textbook. In your notebook, write down an overview of the two stages of photosynthesis. Appreciate that plant cells are involved in the process of cellular respiration, as well as photosynthesis. In your notebook, draw a large plant cell with both mitochondria and chloroplasts. Illustrate the stages of cellular respiration and photosynthesis as they would occur within this plant cell.

**Experimenting with Leaves**
Use the Leaf Lab from Biology Labs On-Line by Pearson to practice what you have learned.
Genetics

During an organism's life cycle, they need to make more cells.

Topics

Mitosis

Throughout your life, your body needs to make more cells. As you grow taller, you need more bone cells. When your skin is broken, you need more skin cells to repair the damage. Cells are always in some stage of the cell cycle, which includes the process of making more somatic cells. When you have completed this topic, you will be able to describe how new somatic cells are generated. What is the life cycle of a cell?

Resources

An Introduction to the Cell Cycle
Complete the Biology Thinkwell section "An Introduction to the Cell Cycle and Mitosis." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

The Cell Cycle
Read Chapter 12 of the Biology textbook. In your notebook, describe the main phases of the cell cycle, including a description of the main phases of mitosis. Draw a labeled picture for each phase of mitosis.

Binary Fission
Chapter 12 of the Biology textbook also describes binary fission, which is the asexual reproduction of unicellular organism. In your notebook, describe the main phases of binary fission.

Meiosis

Sexually reproducing organisms need to make gametes, which are used to pass on genetic material to the next generation. Meiosis is the process of making gametes, and only occurs in the gonads of an organism. When you have completed this topic, you will be able to describe how haploid gametes are generated. How is information passed on to the next generation?

Resources

An Introduction to Meiosis
Complete the Biology Thinkwell section "Meiosis." Be sure to take the quiz after each step to check your understanding. Be sure to understand the genetic significance of haploid and diploid
Meiosis and Sexual Life Cycles
Complete the Biology Thinkwell section "Understanding Meiosis." Be sure to take the quiz after each step to check your understanding.

Read Chapter 13 of the Biology textbook. A karyotype illustrates that sexually reproducing organisms have two complete sets of chromosomes. One set was given by the father, and one set was given by the mother. Each set is a genetic mixture of the previous generations, due to crossing over. Sexually reproducing organisms have the benefit of distributing the gene pool within the population.

In your notebook, explain how genes are replicated and randomly sorted during sexual reproduction.
**The Role of Chromosomes**

DNA holds the code for making the various proteins needed for cellular function. This coding is passed on to the next generation.

**Topics**

**Laws of Inheritance**

After gametes are fertilized, the outcome is the next generation. When you have completed this topic, you will be able to state the laws of inheritance and predict the probable outcomes of a genetic cross. How is it possible to predict the outcome of fertilization?

**Resources**

**Mendelian Inheritance**
Complete the Biology Thinkwell sections "Laws and Probability," "The Laws of Mendelian Inheritance," and "Segregation and Independent Assortment." Be sure to take the quiz after each step to check your understanding.

Read Sections 14.1 and 14.2 of the Biology textbook. In your notebook, state Mendel's laws of inheritance. Your goal is to predict the probable outcome of phenotypes in a genetic cross knowing the genotypes of the parents. Write notes in your lab notebook as needed.

**More Complex Inheritance Patterns**
Complete the Biology Thinkwell section "Genetic Dominance." Be sure to take the quiz after each step to check your understanding.

Read Section 14.3 of the Biology textbook. In your notebook, describe forms of inheritance which vary from simple Mendelian inheritance.

**Pedigrees**
Read Section 14.4 of the Biology textbook.

Complete the Biology Thinkwell section "Sex Linkage and Pedigree Charts." In your notebook, explain why males are more likely to have a sex-linked trait.

**Practicing Predictions**
Complete the genetics problems at the end of Chapter 14 of the Biology textbook. Your goal is to predict the probable outcome of phenotypes in a genetic cross knowing the mode of inheritance (autosomal or x-linked, dominant or recessive).

**Experimenting with Flies**
Use the Fly Lab from Biology Labs On-Line by Pearson to practice what you have learned.

**Phenotype and Genotype Lab**
Complete "Experiment 8: Phenotype and Genotype" in the Science Methods LabPaq. After completing the lab, send your lab report to the course mentor to receive feedback.

**Chromosomes, Genes, Heredity**

Genes are passed on to the next generation. Each chromosome has many genes. Complete the activities below to understand more details on the relationship between chromosomes, genes and heredity.

**Resources**

**The Chromosomal Basis of Inheritance**
Read Chapter 15 of the Biology textbook. Draw pictures showing the general structure of genes and chromosomes. Write down their function. See page 361 of the Biology textbook for pictures from an electron microscope.

The Biology Thinkwell section "Problems with Heredity" goes through problems that can occur with chromosomes during meiosis. Working through this section can help you appreciate the role of chromosomes, and the problems that can occur during meiosis.

**Making Proteins**
Complete the Biology Thinkwell sections "Transcription," "Translation," and "Protein Synthesis Review." Be sure to take the quiz after each step to check your understanding.

Read Chapter 17 of the Biology textbook. Know the general structure and function of RNA, protein, chromosomes, and genes. Draw a series of pictures to show the various steps involved in making a protein.

**Experimenting with Translation**
Use the Translation Lab from Biology Labs On-Line by Pearson to practice what you have learned.

**Gene Expression**
Cells specialize for different functions and therefore have different patterns of gene expression. Remember, all somatic cells have a complete set of chromosomes so have the code to all cellular functions-- but what genes should be turned on or off in each cell?

Complete the Biology Thinkwell section "Controlling Protein Synthesis in Eukaryotes." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.
Read page 362 of the Biology textbook. This page has a picture that reviews protein synthesis and discusses differential gene expression between cells.

**The Effects of Mutations**
Section 17.7 of the Biology textbook and Biology Thinkwell section "Genetic Mutation" both cover types of point mutations, such as missense mutations, nonsense mutations, insertions, deletions, and frameshift mutations. Use either learning resource to understand the various types of point mutations and their consequences. Afterwards, check your understanding by answering the multiple choice Thinkwell exercises for the "Genetic Mutation" section.

**PCR Technology**
Read Chapter 20 of the Biology textbook. Write down the benefits of PCR technology.
Natural Selection

Scientific understanding changes as new evidence and technology emerge.

Topics

Changes Over Time

The genetic makeup of a population can change. When you have completed this topic, you will be able to describe the evidence that shows life has changed over time and the role of natural selection in these changes. This starts the section titled "Evolution" in Thinkwell. What is the mechanism which causes the genetic make-up of a population to change?

Resources

Early Perspectives in Science
Complete the Biology Thinkwell section "Early Perspectives in Science." Be sure to take the quiz after each step to check your understanding. Evolution is related to change over time. Our knowledge in science has changed over time. You do not need to memorize the information in this Thinkwell section, but you should appreciate the change of science knowledge over time, as new discoveries are made. As a science teacher, convey to your students that science is an on-going process and they are a part of this process.

An Introduction to Evolution
Complete the Biology Thinkwell section "An Introduction to Evolution." Be sure to take the quiz after each step to check your understanding. You do not need to memorize the information in this Thinkwell section, but you should appreciate the change of science knowledge over time, as new discoveries are made. Darwin made detailed observations about his environment during his travels. He had time on his voyage to think about his observations. As a science teacher, convey to your students that science is an on-going process and they are a part of this process.

Natural Selection
Complete the Biology Thinkwell section "Evolution: The Theory of Natural Selection." Be sure to take the quiz after each step to check your understanding. In your notebook, write down the main points summarizing natural selection.

Artificial Selection
Complete the Biology Thinkwell section "Examples of Artificial and Natural Selection." Be sure to take the quiz after each step to check your understanding. In agriculture, artificial selection is often practiced, by selecting the best organisms to mate and produce the next generation.

Evidence
Complete the Biology Thinkwell section "Evidence for Evolution." Be sure to take the quiz after
each step to check your understanding. In your notebook, describe the evidence that life has changed over time. The theory of evolution provides an explanation of the evidence, which continues to be validated as more evidence is presented.

**The Fossil Record**
Complete the Biology Thinkwell section "Fossils and Evolution." Be sure to take the quiz after each step to check your understanding. Add a description of this evidence to your previous notes.

**Decent with Modification**
Read Chapter 22 of the Biology textbook. Darwin puts a human face to the process of science. He collected evidence and presented an explanation. If you have followed the steps above, then you have already taken notes on the information in this chapter.
Population Evolution

As the environment changes, so might the population.

Topics

Evolution of Populations

Mutations play a role in the evolution of populations. When you have completed this topic, you will be able to explain how the traits within a population help its survival. Why is it beneficial for a population to have genetic variety within its members?

Resources

Variation
Complete the Biology Thinkwell section "Variations in Populations." Be sure to take the quiz after each step to check your understanding. In your notebook, write down the role of natural selection on species variation.

Changes in Populations
Read Chapter 23 of the Biology textbook. In your notebook, explain the role of mutations in evolution. How are they beneficial? As you continue reading the chapter, think about how adaptations influence the survival of a population.

Experimenting with Evolution
Use the Evolution Lab from Biology Labs On-Line by Pearson to practice what you have learned.
**Speciation**

As populations change, a new species might emerge.

**Topics**

**Speciation**

Populations can change over time in different ways. The change could be within the whole population, could just affect a subgroup of the population, or could refer to the entire population being replaced by a new population. When you have completed this topic, you will be able to compare different ways populations can change over time. How are new species formed?

**Resources**

**Speciation**
Complete the Biology Thinkwell section "Speciation" and "Species Concepts." Be sure to take the quiz after each step to check your understanding. Draw a diagram which explains how reproductive or geographic isolation can affect speciation. Provide some examples of populations which have evolved. In your notebook, write down the role of natural selection on speciation.

**The Time Frame for Evolution**
Complete the Biology Thinkwell section "Time Frame for Evolution." Be sure to take the quiz after each step to check your understanding.

**Different Magnitudes of Evolution**
Read Chapter 24 of the Biology textbook. Write notes in your lab notebook comparing gradualism and punctuated equilibrium. In your notebook, compare and contrast microevolution, macroevolution and speciation.

**Experimenting with Populations**
Use the PopGen Lab from Biology Labs On-Line by Pearson to practice what you have learned. You will be able to study factors that can lead to changes in the genotype frequency in a population.

**Extinction**
Describe reasons for the extinction of species. What role does natural selection have on extinction?

**The History of Life**
Now let's look at the bigger picture of how populations have changed. Complete the activities below to better understand when the different forms of life first appeared on earth. How might life have begun on earth? When were dinosaurs in great abundance?

**Resources**

**The Origin of Life**
Complete the Biology Thinkwell section "The Origin of Life." Be sure to take the quiz after each step to check your understanding.

Read Section 26.1 of the Biology textbook. Write notes in your lab notebook related to how life might have begun in the water during the early stages of earth's atmosphere.

**History of Life on Earth**
Read the remaining sections of Chapter 26 in the Biology textbook. In your notebook, create a timeline depicting when different life forms first appeared on earth.

**Human Evolution**
Complete the Biology Thinkwell section "Human Evolution." Be sure to take the quiz after each step to check your understanding.

Read Section 34.8 of the Biology textbook. Write notes in your lab notebook related to the evolution of humans.
Classifying Life

While studying life on earth, scientists have used various methods for grouping organisms.

Topics

Taxonomy

This starts the section titled "Biology of Organisms" in Thinkwell. There are many organisms that live on earth. Scientists have studied their characteristics in order to classify living organisms into groups. When you have completed this topic, you will be able to discuss ways of classifying organisms. How does a scientist in Germany know they are discussing the same organism as a scientist in Australia?

Resources

Properties of All Living Things
Read Section 1.1 "Biologists explore life from the microscopic to the global scale" on pages 2-8 of the Biology textbook.

Complete the Biology Thinkwell section "Unity and Diversity of Life on Earth." Be sure to take the quiz after each step to check your understanding. In your lab notebook, list the characteristics of all living things.

Classification
Complete the Biology Thinkwell sections "Classifying Life" and "Classifying Earth's Organisms" which are part of the Biology of Organisms section. Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

Read Chapter 25 of the Biology textbook. You will practice reading cladograms while reading this chapter. In your lab notebook, describe the system used to classify organisms and binomial nomenclature.

Eukaryotic Organisms
Complete the Biology Thinkwell sections "Protists," "Fungi," and "Plants." In your lab notebook, describe the characteristics of protists, which are one-celled eukaryotic organisms. Also describe the characteristics of these multicellular groups of organisms: plants, fungi and animals. Plants and animals are covered in more detail in later weeks in this document.

Cells, Tissues, Organs, Organ Systems and Homeostasis

The human body is organized into organ systems, and each serves a different role to sustain a steady-state, and therefore life. When you have completed this topic, you will be able to describe
the relationships between these terms. How does the sugar we eat travel inside a cell? How does the oxygen we breath travel to the mitochondria?

**Resources**

**Organization**
Describe the organization of cells into tissues, organs, and organ systems. Complete the Biology Thinkwell section "Introduction to Animal Systems and Homeostasis." Be sure to take the quiz after each step to check your understanding.

**Digestive System**
Read Chapter 41 of the Biology textbook. In your notebook, describe the general structure and function of the digestive system.

Complete the Biology Thinkwell section "The Digestive System." Be sure to take the quiz after each step to check your understanding.

**Circulatory and Respiratory Systems**
Read Chapter 42 of the Biology textbook. In your notebook, describe the general structure and function of the circulatory and respiratory systems. Please answer the following question in your notebook:

How does blood tissue transport gases?

Complete the Biology Thinkwell sections "Circulation" and "Gas Exchange and Transport Systems." Be sure to take the quiz after each step to check your understanding.

**Osmoregulation**
Read Chapter 44 of the Biology textbook. In your notebook, describe osmoregulation, and the methods various animals use to maintain homeostasis through osmoregulation.

**Experimenting Through Simulations**
Use the Cardio Lab from Biology Labs On-Line by Pearson to practice what you have learned.

**Reproductive System**
Read Chapter 46 of the Biology textbook. In your notebook, describe the general structure and function of the reproductive system.

**Nervous System**
Read Chapter 48 of the Biology textbook. In your notebook, describe the general structure and
function of the nervous system. In addition, describe the general structure and function of your sensory organs (ears, eyes, tongue, nose).

Complete the Biology Thinkwell sections "The Nervous System" and "The Nerve Impulse." Be sure to take the quiz after each step to check your understanding.

**Homeostasis**
Using the information you have learned so far, list mechanisms by which humans maintain homeostasis. How is our internal body temperature kept within a certain range? How is our blood glucose levels kept within a certain range? How are oxygen and carbon dioxide levels kept within a certain range?
Staying Healthy

Organisms have methods for staying healthy.

Topics

Disease and the Immune System

Your body's immune system functions to combat diseases. When you have completed this topic, you will be able to describe microorganisms, viruses and mechanisms to combat diseases. How does our body fight off an infection?

Resources

The Immune System
Complete the Biology Thinkwell sections "The Immune System: An Introduction" and "The Immune System Continued." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

Read Chapter 43 of the Biology textbook. In your notebook, describe the defenses our body has to stay healthy.

HIV and the Immune System
Complete the Biology Thinkwell section "HIV and the Immune System." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

The Causes of Disease
Read Sections 18.2, 27.5 and 28.4 of the Biology textbook. In your notebook, write down answers to the following questions: What is the role of viruses in causing disease? What is the role of microorganisms in causing disease and maintaining health?

Microbes Lab
Complete "Experiment 6: Microbes Everywhere" in the Science Methods LabPaq. After completing the lab, send your lab report to the course mentor to receive feedback.

Spread of Contagion Lab
Complete "Experiment 7: Spread of Contagion" in the Science Methods LabPaq. After completing the lab, send your lab report to the course mentor to receive feedback.
Animals and Plants

Animals and plants have a variety of structures for meeting the needs of the organism.

Topics

Structure and Function in Animals

Animal structures address the functions of support, nutrition, reproduction and development through life cycles, and gas exchange. Some invertebrate animals have exoskeletons for support (such as lobsters) while others use the properties of water to support their bodies (such as squid). Vertebrate animals have skeletons for support. All animals must have a mechanism for providing all cells with nutrients, as well as a means for exchanging oxygen and carbon dioxide. In order to survive, animals must have a mechanism for producing offspring, as well as strategies for offspring to reach adulthood. In this section, you are investigating the structures animals have to perform these various functions. How does a clam eat? How does a worm breathe?

Resources

Invertebrate Structures
Chapter 33 of the Biology textbook describes the structures of invertebrate animals. For each section in this chapter, describe the diversity of structures that the invertebrate phylum has to perform functions related to support, nutrition, reproduction and development through life cycles, and gas exchange. For example, section 33.1 describes the Porifera phylum. Take notes on how this phylum performs functions related to support, nutrition, reproduction and development through life cycles, and gas exchange.

Vertebrate Structures
Read Chapter 34 of the Biology textbook. In your notebook, describe the diversity of structures vertebrate animals have to perform functions related to support, nutrition, reproduction and development through life cycles, and gas exchange.

Structure and Function in Plants

Plant structures also address the functions of support, nutrition, reproduction and development through life cycles, and gas exchange. Plant cells have cell walls to help with support. All plants must have a mechanism for providing all cells with nutrients, as well as a means for exchanging oxygen and carbon dioxide. In order to survive, plants must have a mechanism for producing offspring, as well as strategies for offspring to reach adulthood. In this section, you are investigating the structures plants have to perform these various functions. What keeps a tree standing tall without bones? How does a pine tree reproduce?

Resources
The Diverse Structures of Plants
Read Chapter 35 of the Biology textbook. In your notebook, describe the diversity of structures plants have to perform functions related to support, nutrition, reproduction and development through life cycles, and gas exchange.

Stimulus and Response in Plants and Animals
To increase their survival, plants and animals have mechanisms to respond to their environment. After completing this topic, you will be able to explain behaviors which are a result of an organism responding to their environment. How does a plant react to darkness? How does an animal respond to cold?

Resources

Plant Responses
Read Chapter 39 of the Biology textbook. In your notebook, describe different ways plants respond to stimulus in their environment.

Animal Responses
Read through Chapter 40, taking notes on how the animals respond to stimuli. For example, many animals respond to heat by sweating which helps cool down the body temperature.
Introduction to Ecology

Ecology is the study of interactions between organisms and the environment.

Topics

Interactions between organisms and their environment

This starts the section titled "Ecology" in Thinkwell. When you have completed this topic, you will be able to explain the relationships within different biomes and the adaptations of species within the biomes. How do animals survive the extreme temperatures of the desert? How do plants survive cold winters?

Resources

Introduction to Ecology
Complete the Biology Thinkwell section "Introduction to Ecology." Be sure to take the quiz after each step to check your understanding. Write notes in your lab notebook as needed.

Biomes
A Biome contains many ecosystems. Complete the Biology Thinkwell section "Biomes." Be sure to take the quiz after each step to check your understanding. In your lab notebook, describe a few Biomes and some species which live there.

Ecology and the Biosphere
Read Chapter 50 of the Biology textbook. For the Biomes you described previously, explain the relationships between the abiotic characteristics and the variations, tolerances, and adaptations of species in those biomes.
Populations and Communities

A community includes many populations interacting with each other.

Topics

Population Ecology

An organism can be very well adapted to a particular environment, yet its survival is still dependent on the resources available. When you have completed this topic, you will be able to explain how the size of a population is limited by its environmental resources. How many squirrels can a particular forest sustain?

Resources

Populations
Read Sections 52.1 and 52.2 of the Biology textbook. As Figure 52.2 depicts, fluctuations in a population's size are determined by the relative rates of birth, immigration, emigration, and death. Using information from these sections, elaborate on why population size fluctuates.

Carrying Capacity
Complete the Biology Thinkwell section "Population Ecology." Be sure to take the quiz after each step to check your understanding.

Read Sections 52.3 and 52.4 of the Biology textbook. In your notebook, explain the concept of carrying capacity and how it depends on the availability of resources.

Revisiting Population Size Fluctuations
Finish reading Chapter 52 of the Biology textbook. Using information from these sections, elaborate in your notebook why population size fluctuates.

Experimenting with Demography
Use the Demography Lab from Biology Labs On-Line by Pearson to practice what you have learned.

Community Ecology

There are many dynamics at work within a community. Matter is exchanged between its members while competing for resources. Organisms within a community serve a function, allowing the community to exist. When you have completed this topic, you will be able to explain impact of interactions within a community. Why would an organism want to help out another? How do organisms compete for resources?
Resources

Competition
Begin reading Section 53.1 of the Biology textbook. Take notes while reading about competition by describing the various forms of competition between organisms and how these affect population size. Also, explain how organisms may serve certain functions (ecological niches).

Predation, Parasitism, Commensalism, and Mutualism
Complete the Biology Thinkwell section "Community Ecology: Interspecific Interactions." Be sure to take the quiz after each step to check your understanding. Add to your notes as needed.

In addition, continue reading Section 53.1 of the Biology textbook. In your notebook, describe the classifications of predation, parasitism, commensalism, and mutualism. Provide examples of each.

Energy Flow Through Ecosystems
Complete the Biology Thinkwell section "Energy Flow in an Ecosystem." Be sure to take the quiz after each step to check your understanding. A food web illustrates the flow of energy within an ecosystem, but only about 10% of the energy from one organism transfers to the next trophic level. Much of the energy is used for respiration, growth, or lost to the environment in the form of heat.

Read Section 53.2 of the Biology textbook. In your notebook, describe the flow of energy through ecosystems.

Experimenting with Population Ecology
Use the PopEco Lab from Biology Labs On-Line by Pearson to practice what you have learned. In this lab, you can change various conditions and discover the effects on the community.
Interdependence Within an Ecosystem

The biotic and abiotic components of the environment constantly interact. The oxygen in the atmosphere is considered abiotic, but after we breathe it in, the oxygen is then considered biotic as the atoms are reconfigured inside of us. There is interdependence between all components of an environment.

Topics

Ecosystems

Food is more than just a source of energy. It also includes elements needed for the organism to make new molecules. Nitrogen, for example, is needed for the body to make more proteins. When you have completed this topic, you will be able to explain how elements are circulated within an ecosystems and how humans impact ecosystems, both positively and negatively. For example, how are humans affecting the carbon cycle?

Resources

Matter and Energy Transfer
Read Sections 54.1-54.3 of the Biology textbook. Explain how matter and energy are transferred over time through food webs and back to the abiotic environment, including the role of decomposers.

Biogeochemical Cycles
Complete the Biology Thinkwell section "Chemical Cycling in the Ecosystem." Be sure to take the quiz after each step to check your understanding.

Read Section 54.4 of the Biology textbook. Explain to a peer how carbon, nitrogen, phosphorous and sulfur, and trace elements such as iron, are cycled between living (biosphere) and non-living (atmosphere, hydrosphere, lithosphere) parts of an ecosystem and globally.

Effects of Humans on Ecosystems
Complete the Biology Thinkwell section "Human Effect on the Ecosystem." Be sure to take the quiz after each step to check your understanding.

Read Section 54.5 of the Biology textbook. In your notebook, make a chart comparing the positive and negative effects of human activities on ecosystems, including land use policies and water quality.

Biodiversity

Biodiversity refers to the variety of living organisms. Healthy ecosystems have a variety of living
organisms that interact. For example, a predator should have several animals available as its prey, so that more opportunities are available for food. A variety of herbivores should be available to manage the plant species. When you have completed this topic, you will be able to explain how organisms depend on each other to meet basic needs. What are the benefits of having a diverse selection of species in an ecosystem?

**Resources**

**Biodiversity**
Complete the Biology Thinkwell section "Community Ecology: Species Diversity." Be sure to take the quiz after each step to check your understanding.

Read Chapter 55 of the Biology textbook. Scientists around the world record their observations of species. By analyzing these observations, conclusions can be made regarding the fluctuations in biodiversity over time. In your notebook, explain the benefits of biodiversity and the threats to biodiversity (such as habitat destruction).

After reading this chapter, you should also have a better understanding of the reasons for the extinction of species and the role natural selection has on extinction. These topics were touched upon when studying earlier about speciation.

**Interdependence**
Reflecting on what you have learned so far, explain how organisms depend on each other to meet basic needs. Provide examples of how organisms might depend on each other for shelter, food, or protection. Write your response in your notebook.
Conclusion

Congratulations on completing all the weeks for Life Science! As you can appreciate, Life Science covers a broad range of topics. Your studies included the microscopic world inside cells, the body systems inside the organism as well as the organisms itself, the environment where the organism lives, and the evolution of populations within the environment.

For your convenience, screenshots showing the instructions for each performance task related to this course of study are available at the links below. Please note that the instructions may change slightly from time to time. For the most up-to-date instructions, evaluation rubrics, and other related material, please log in to TaskStream. You will not have access to these tasks in TaskStream until you request them through your AAP and your mentor approves your request.

TaskStream SLA4/5Task Ecosystems
TaskStream SLA4/5Task Gene Traits
TaskStream SLA4/5Task Growth of Organisms
TaskStream SLA4/5Task Inherited Characteristics

Topics

Next Steps

As a science teacher, you should comprehend how these topics are interrelated so that you can share the connections with your students. During your Life Science studies, you performed hands-on labs to apply your new knowledge. Share this experience with your students. What strategies helped you learn the material? Write these down and share with your students when teaching. You now need to demonstrate your competency in Life Science by passing the objective exam and performance assessments.

Resources

Preassessment and Objective Assessment
Take the preassessment for the SLC exam, available through your AAP.

Log in to your MyWGU Student Portal.
Go to the "My AAP" tab.
In the list below "Course Details," find the assessment you are working on.
In the "Assessment Preparation" column, click "Preassessment."

In the window that pops up, click "Click here to refer for this preassessment." A request will be sent to your mentor for approval.

Once your mentor has approved your request, return to the "My AAP" tab and click "Preassessment" in the "Assessment Preparation" column.

In the window that pops up, click "Click here to take this preassessment." You will then begin the preassessment.

The results will provide a percentage for each of the bright blue topics in this course of study. You should then review your notes for topics with low scores. Thinkwell has exercises to check your understanding, as well as the textbook's website. Another way to check your understanding is to start with blank paper and write down your understanding of the topic. Pretend you are teaching this topic to a student. You can also post your understanding in the message board for review. Once you have confidence with your new knowledge, take the preassessment again. Schedule the SLC exam after passing the preassessment.

Log in to your MyWGU Student Portal.

Go to the "My AAP" tab.

In the list below "Course Details," find the assessment you are working on.

In the "Assessment Scheduled Date" column, click "Schedule Now."

In the window that pops up, click "Search."

A new window will come up. In this window, you can either select a previously-used site or search for a different site approved by WGU. Select the site(s) by clicking on the box beside the name. This will move your selection(s) to the "Selected Sites" box.

Once you have selected at least one site, click "Update."

You will be returned to the previous window, and the site information will now be filled in. Click "Continue."

Enter three different potential dates with the times you can take the assessment. Note: The dates must be at least two weeks from the day you refer for the assessment.

Click "Continue" once your potential dates and times are filled in.

If there are other considerations you would like to inform the Assessment Delivery Team about, discuss them in the "Other Considerations" box that appears, and then click "Continue." If not, simply click "Continue."
A request will be sent to your mentor for approval.

Once your mentor has approved your request, our Assessment Delivery Team will begin scheduling your assessment at the proctor site that you submitted. Once your assessment has been scheduled, you will receive a confirmation e-mail with the date, time, and proctor site. The status on your AAP will then change to "Scheduled."

### Summative Performance Assessment

Log in to your MyWGU Student Portal.

Go to the "My AAP" tab.

In the list below "Course Details," find the assessment you are working on.

In the "Assessment Scheduled Date" column, click "Schedule Now."

A new window will come up. If there are other considerations you would like to inform the Assessment Delivery Team about, discuss them in the "Other Considerations" box that appears and then click "Continue." If not, simply click "Continue."

A request will be sent to your mentor for approval.

Once your mentor has approved your request, our Assessment Delivery Team will open the tasks required for the assessment in TaskStream. You will log in to TaskStream to receive the instructions, see the rubric, and submit your assessment for grading.

After being referred, you will be able to access the SLA tasks within TaskStream. The tasks can be completed in any order. The directions for each task are in TaskStream. After writing up your task, check that you have covered all the requirements in the rubric. If you need help, contact the course mentor.

### Feedback

If you wish to provide feedback on this course of study, please contact Rob Duncan at rduncan@wgu.edu.

Click here to review University ADA policy.