

What's Next in Curriculum Mapping

The Road Ahead



Scottsdale Christian Academy 2021-2022

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Visiting Team Recommendations

- ❑ SCA has a set of school wide expected student outcomes. **However, throughout interviews with faculty and staff, the team observed that the majority of the SCA community are unaware of the ESOs.** After a review of the handbooks, curriculum documentation, and Strategic Plans, the ESOs are missing from these important documents. (**Curriculum Trak**, faculty interviews, Self-study page 109). Page 47.
- ❑ The implementation of Curriculum Trak was helpful to organize curriculum information already in place and was a significant improvement. However, it is important that **all subjects are completed with in-depth Biblical integration components, expected student outcomes, assessment strategies, resources, time allocations, and instructional methods.** Page 53.
- ❑ **Review and revise current curriculum maps** to include expected student outcomes, biblical integration, assessment strategies, resources, time allocations, and instructional methods **in all courses and consistently use them to drive the instructional program.** This will provide for the further implementation of a unified academic vision across the divisions. (Indicator 5.2) Page 36.



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1. Expected Student Outcomes

- ❑ A1. Students will have a dedication for intellectual inquiry and committed to lifelong learning.
- ❑ A2. Students will reason wisely, listen carefully, think precisely, and articulate persuasively.
- ❑ A3. Students will develop skills to question, investigate, problem solve and make wise decisions.
- ❑ A4. Students will have a comprehensive command of the fundamental processes used in communicating with others (speaking, listening, writing, reading, and performing).
- ❑ A5. Students will use technology to communicate and find, analyze, and evaluate information in a God-honoring manner.
- ❑ A6. Students will be equipped to make wise, life-defining choices, regarding their individual college, career, and life calling.



2. Curriculum Trak Column Revisions

Unit	School-Selected Standards	Expected Student Outcomes	* Goals & Objectives	* Instructional Methods
				Quarter 1

* Biblical Integration	* Assessment Description	* Assessment Strategy	* Unit Resources



3. Instructional Methods

- Hands-on Learning
- Learning Centers
- Adapting to Learning Styles/Multiple Intelligences
- Debate
- Project-Based Learning
- Role Play/Simulations/Drama
- Music and Songs
- Generating and Testing Hypotheses
- Modeling
- Lecture
- Note Booking/Journaling
- Cooperative Learning
- Direct Instruction
- Graphic Organizers
- Socratic Seminar
- Peer Teaching/Collaboration
- Discovery/Inquiry-Based Learning
- Reading and Writing Across the Curriculum



4. Assessment Strategy

- Homework - Practice
- Chapter Exam
- Oral – Written Report
- Essay - Analysis
- Rubric - Scoring Guide
- Game Activity – Simulation
- Teacher Observation
- Quiz – Online Quiz
- Unit Exam
- Writing Prompt - Post
- Research Project
- Performance
- Poll - Interview



5. Expected Student Outcomes

A.	Academic
<input type="checkbox"/>	A.1 Students will have a dedication for intellectual inquiry and committed to lifelong learning.
<input type="checkbox"/>	A.2 Students will reason wisely, listen carefully, think precisely, and articulate persuasively.
<input checked="" type="checkbox"/>	A.3 Students will develop skills to question, investigate, problem solve and make wise decisions.
<input type="checkbox"/>	A.4 Students will have a comprehensive command of the fundamental processes used in communicating with others (speaking, listening, writing, reading, and performing).
<input checked="" type="checkbox"/>	A.5 Students will use technology to communicate and find, analyze, and evaluate information in a God-honoring manner.
<input type="checkbox"/>	A.6 Students will be equipped to make wise, life-defining choices, regarding their individual college, career, and life calling.



5. Expected Student Outcomes

SP.	Spiritual
<input type="checkbox"/>	SP.1 Students will love God with all their hearts, souls, minds, and strength.
<input type="checkbox"/>	SP.2 Students will live lives driven by Gospel-centered discipleship.
<input checked="" type="checkbox"/>	SP.3 Students will honor and respect the Bible as God's authoritative Word.
<input type="checkbox"/>	SP.4 Students will be equipped to use their knowledge and understanding of God's Word to articulate and defend their faith and their Christian worldview.
<input type="checkbox"/>	SP.5 Students will embody His heart of servant leadership both locally and globally to serve humanity as Jesus commanded.
<input type="checkbox"/>	SP.6 Students will use one's individual giftedness to seek out and serve in those areas in which they are gifted.



A Look at Revised Maps

Unit	School-Selected Standards	Expected Student Outcomes	Goals & Objectives
Quarter 1			
Science 8 Introduction: Life science <i>(updated 2/5/21)</i>	SC.7.SIR.2.b(1) design and implement experimental investigations by making observations, asking well-defined questions, formulating testable hypotheses, and using appropriate equipment and technology; SC.7.SIR.2.e(1) analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. SC.7.SIR.3.a(1) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student; SC.7.SIR.3.b(1) use models to represent aspects of the natural world such as human body systems and plant and animal cells;	A.1 Students will have a dedication for intellectual inquiry and committed to lifelong learning. A.3 Students will develop skills to question, investigate, problem solve and make wise decisions.	Outcomes to be met during the course: Grade Eight Science TLW: <ul style="list-style-type: none"> • Explain the relationship between science and modeling • Describe three characteristics of scientific thinking • List six limitations of science • Describe three characteristics of a biblical view of science • Explain how a person's worldview influences his interpretation of evidence • Summarize a naturalistic response to three key worldview questions • Summarize a biblical response to three key worldview questions • Defend the claim that a biblical worldview - not a naturalistic worldview - makes sense of reality • Explain why life science is profitable study for the Christian • List and describe the steps of the scientific method • List three characteristics of a problem that can be solved using the scientific method • Distinguish between problems that are best solved by a controlled experiment and those that are best solved by a survey • Design a controlled scientific experiment • Describe several ways in which the scientific method is subject to error • Use common metric system measurements

A Look at Revised Maps

Instructional Methods	Biblical Integration	Assessment Description	Assessment Strategy	Unit Resources
<ul style="list-style-type: none"> ✓ Lecture ✓ Note Booking/Journaling ✓ Cooperative Learning 	<ul style="list-style-type: none"> ✓ G1.3 God is sovereign over all things. ✓ MH3.1 Humans were created by God's choice and design ✓ See Resources 	<p>Sieling, Kevin:</p> <p>Group Activity:</p> <ul style="list-style-type: none"> • Discuss what science is in small groups • Have students brainstorm to come up with questions they want to learn the answers to during their life science class • Discuss how naturalistic beliefs have influenced history • Take the students through the steps of the scientific method and then apply them to different cases • Ask students to create two problems that would be solved by a survey and two that would be solved best by an experiment <p>Writing:</p> <ul style="list-style-type: none"> • List ways that mission agencies meet physical needs in order to have opportunities to advance the gospel 	<ul style="list-style-type: none"> ✓ Homework - Practice ✓ Writing Prompt - Post ✓ Rubric - Scoring Guide ✓ Teacher Observation 	<p>Sieling, Kevin:</p> <p>Biblical Integration Concepts</p> <ul style="list-style-type: none"> • Using Science to Obey the Creation Mandate • Using Science to Glorify God • Using Science to Help Other People • Christianity does not just change how a person acts but also how he thinks • Defining worldview is part of doing science • Differences exist between secular and Christian worldviews • The work of science is making models and analyzing them • Different origin views claim to be biblical • Historical science is especially affected by worldview • God uses the study of earth science to help people, exercise dominion, and glorify Himself. <p>Biblical Integration Strategies</p> <ul style="list-style-type: none"> • Read Mark 12:30-31 and discuss the foundation for all dominion work • Review the redemption and Earth Science quote in the textbook • Discuss humanitarian aid and how that shows love for other people • Discuss wrong and right thinking in the area of science • Discuss science and Christianity • Discuss the Gap Theory • Discuss how Christianity does not just change how a person acts but also how he thinks • Lead students to define worldview and have them explain how it is a part of doing science

A Look at Revised Maps

Unit	School-Selected Standards	Expected Student Outcomes	Goals & Objectives
<p>Cells and Heredity: Cells <i>(updated 2/5/21)</i></p>	<p>SC.6.OE.12.a(1) understand that all organisms are composed of one or more cells;</p> <p>SC.6.OE.12.b(1) recognize that the presence of a nucleus is a key factor used to determine whether a cell is prokaryotic or eukaryotic;</p> <p>SC.6.OE.12.d(1) identify the basic characteristics of organisms, including prokaryotic or eukaryotic, unicellular or multicellular, autotrophic or heterotrophic, and mode of reproduction, that further classify them in the currently recognized kingdoms;</p>	<p>A.3</p> <p>Students will develop skills to question, investigate, problem solve and make wise decisions.</p> <p>SC.1</p> <p>Students will serve compassionately with actions that recognize everyone is uniquely created in the image of God and is loved by God and therefore of great worth.</p>	<p>TLW:</p> <ul style="list-style-type: none"> • Describe the characteristics of a cell membrane • Distinguish between passive transport and active transport • Compare the processes of diffusion and osmosis • List the three basic parts of a cell • Describe three cellular boundaries and identify organisms that have or do not have each boundary • Identify the parts of a compound light microscope • Calculate the magnifying power of a compound light microscope • Describe the structures and functions of nine cellular organelles • Explain the role of the nucleus in a cell • Differentiate between eukaryotic cells and prokaryotic cells • Give examples of eukaryotic organisms and prokaryotic organisms • List several differences between plant cells and animal cells • Use the concept of irreducible complexity to critique evolution



A Look at Revised Maps

Instructional Methods	Biblical Integration	Assessment Description	Assessment Strategy	Unit Resources
<ul style="list-style-type: none"> ✓ Note Booking/Journaling ✓ Project-Based Learning ✓ Peer Teaching/Collaboration 	<ul style="list-style-type: none"> ✓ MH3.1 Humans were created by God's choice and design ✓ P5.4 The purpose for all things centers in Christ. Created for Him, through Him. ✓ See Resources 	<p>Sieling, Kevin:</p> <p>Group Activity:</p> <ul style="list-style-type: none"> • Show the students one living and one nonliving thing and make a list of characteristics of each • Count out 1000 of something to show how much that is • Discuss the different size of an elephant and a mouse and the similar size of cells • Talk to the students about what job they want to do • Have students keep a log of the date, description, and where they observed each organism • Provide a collection of items for students to examine and classify • Compare the classification system to your community's "classification" • Discuss man's physical body classification <p>Writing:</p> <ul style="list-style-type: none"> • Research recently discovered species and write about whether each new species belongs in a current group or not 	<ul style="list-style-type: none"> ✓ Writing Prompt - Post ✓ Game Activity – Simulation ✓ Teacher Observation 	<p>Sieling, Kevin:</p> <p>Biblical Integration Concepts</p> <ul style="list-style-type: none"> • Complexity of life as a testimony to God's benevolent design • Difficulty of evolution to explain the cell's complexity • God's glory declared in his creation • Irreducible complexity and design in the cell • Serving God as a pathologist <p>Biblical Integration Strategies</p> <ul style="list-style-type: none"> • Read Psalms 139:14 and think about ways we appreciate creation. • The interrelatedness of cilia and flagella molecules and structures could not have happened by chance.



Visiting Team Recommendations

- ❑ Therefore, as textbooks become out of date or are discontinued, faculty will be part of the process to choose a new curriculum and then will need to review and update curriculum maps. Page 35.
- ❑ We are starting with Math and Bible just as we did 4 years ago.
- ❑ Next Accreditation is the Fall of 2025.

