

SCI0101_202338_Staging_EMBR_TEM

SCI-101

2023 05/01/2023 to 04/30/2024 Modified 06/27/2023

Course Description

This science course introduces students to basic science skills that will be built upon in years to come. Students will begin conducting simple experiments and be introduced to classifying plants and animals based on superficial characteristics. Emphasis is placed on the relationships among objects and their interactions. Students are expected to know the fundamental relationships between the sun and Earth and the relationship between seasonal changes and plant and animal activities. Students will also begin to develop an understanding of moving objects, critical natural resources, and how to be a scientist. Students will deepen their education through these areas with biblical integration throughout the course.

Rationale

First-grade students will use their inquiry skills to discover scientific relationships in the world around them. They will explore experimentally how to classify, relate, and understand objects around them.

Course Learning Outcomes

- A. The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.
- B. The student will investigate and understand that moving objects exhibit different kinds of motion.
- C. The student will investigate and understand how different common materials interact with water.
- D. The student will investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics.
- E. The student will investigate and understand that animals and humans have basic needs and certain distinguishing characteristics.
- F. The student will investigate and understand the basic relationships between the sun and Earth.
- G. The student will investigate and understand weather and seasonal changes.
- H. The student will investigate and understand that natural resources are limited.
- I. The student will identify the basic components and functions of human body systems and the importance of safe practices, positive interpersonal relationships, and environmental health.
- J. The student will explain that good health is related to healthy decisions.
- K. The student will identify specific rules and practices to promote personal safety and socially responsible behaviors.

Course Resources

See Ember's [Systems Requirements](#) for computer specifications necessary to operate this curriculum.

- Note: Embedded YouTube videos may be utilized to supplement Ember's YouTube videos are the property of the respective

content creator, licensed to YouTube for distribution and user access. As a non-profit educational institution, Ember is able to use YouTube video content under the YouTube Terms of Service. For additional information on copyright, please contact the [Jerry Falwell Library](#)

* Course Policies

Types of Assessments

To simplify and clearly identify which policies apply to which assessment, each assessment has been categorized into one of four categories: Lesson, Assignment, Quiz, or Test. Each applicable item on the course Modules page has been designated with an identifier chosen from among these categories. Thus, a Quiz on the American Revolution may be designated by the title, "1.2.W Quiz: The American Revolution."

- **Lesson:** *Any item on the Modules page designated as a "Lesson"*

These include instructional content and sometimes an assessment of that content. Typically, a Lesson will be the day-to-day work that a student completes.

- **Assignment:** *Any item on the Modules page designated as an "Assignment"*

Typical examples of Assignments include, but are not limited to, papers, book reports, projects, labs, and speeches. Assignments are usually something that the student should do his or her best work on the first time.

- **Quiz:** *Any item on the Modules page designated as a "Quiz"*

This usually takes the form of a traditional assessment where the student will answer questions to demonstrate knowledge of the subject. Quizzes cover a smaller amount of material than Tests.

- **Test:** *Any item on the Modules page designated as a "Test"*

This usually takes the form of a traditional assessment where the student will answer questions to demonstrate knowledge of the subject. Tests cover a larger amount of material than Quizzes.

Materials Selection Policy

Ember curates educational materials that are consistent with the school's philosophy; however, the fallen human condition depicted in literature (as in Scripture itself) is not always pleasant. Valuable works sometimes have objectionable or profane elements. Good books provide four (4) recognized values.

- They build godly attitudes and character traits.
- They deepen our social and cultural awareness.
- They strengthen our use of written language.
- They provide a lifelong source of enjoyment and relaxation.

In order to instill these values in students and fulfill the stated objectives of the school, all Ember students are expected to read and study good books on a regular basis. Recognizing that materials designed for one level may not be appropriate for another, three (3) levels of criteria are applied:

- Elementary materials must contain no objectionable material,
- Objectionable elements in sixth through eighth-grade materials must be limited and must serve a specific educational purpose, and
- Objectionable content may be included in high school materials but must be outweighed by positive literary, curricular, and/or Christian values.

The curriculum department has approved required educational materials for students.

Resubmission Policy

Students are expected to submit their best work on the first submission for every Lesson, Assignment, Quiz, and Test. However, resubmissions may be permitted in the following circumstances:

- **Lesson:** Students are automatically permitted two attempts on a lesson. Students may freely resubmit for their first two attempts without the need for teacher approval.

If a student feels that he or she deserves a resubmission on a Lesson, Assignment, Quiz, or Test due to a technical issue such as a computer malfunction, the student should message his or her teacher to make the request. With Ember, the teacher may be a physical school teacher or the student's parent/guardian. The teacher can give another attempt from his or her Canvas account. For more information on how to do this, please review the Ember orientation course.

Schedule

Module 1: Becoming a Scientist

- Week 1: Scientific Tools
- Week 2: Measurement and Inferences

Module 2: Matter, Force, Motion, & Energy

- Week 3: Matter
- Week 4: Changing Matter
- Week 5: Force and Motion

Module 3: The Sun & Earth

- Week 6: The Sun and Earth
- Week 7: Seasons
- Week 8: Climate and Weather
- Week 9: Third Quarter Review

Module 4: Plants & Animals

- Week 10: Plants
- Week 11: Plant Life Cycle
- Week 12: Animals
- Week 13: More About Animals

Module 5: Natural Resources

- Week 14: Natural Resources
- Week 15: Caring for the Earth

Module 6: Caring for Ecosystems & Others

- Week 16: Ecosystems
- Week 17: Caring for Yourself and Others
- Week 18: Fourth Quarter Review