

3rd Grade Science

SCI0300

Course Description

This course will provide the student with an opportunity to discover scientific topics through interactive and engaging activities and lessons. The student will study various aspects of God's creation, with Christian values as a guide. The truths of Creation and God's design will be interwoven throughout the course, allowing the student to learn sound scientific knowledge through a biblical worldview.

Rationale

This course offers a deeper study of science, allowing the student to observe and understand principles through the crucial perspective that everything is designed by our Great Creator. The course enables the student to think clearly about scientific principles and to examine the way they work through a biblical lens—paving the way for not only the current study of science, but also for future studies.

Prerequisite

2nd Grade Science

Biblical Integration Outcomes

- A. The student will understand that God has created a unique world where everything works together.
- B. The student will understand that God does things in an orderly manner.

Measurable Learning Outcomes

- A. The student will identify and understand the importance of observation and the scientific method.
- B. The student will identify and understand different measurements.
- C. The student will identify and understand simple and compound machines.
- D. The student will identify and understand the five senses.
- E. The student will identify and understand matter.
- F. The student will identify and understand reflection, refraction, shadow.
- G. The student will identify and understand opaque, translucent, transparent.
- H. The student will identify and understand the seasons.
- I. The student will identify and understand the moon's phases.

- J. The student will identify and understand the oceans.
- K. Identify and understand water, plant, and animal life cycles.
- L. Identify and understand behavioral and physical adaptations.
- M. Identify and understand energy and its resources.
- N. Distinguish between living things and non-living things.
- O. Identify and understand herbivore, carnivore, and omnivore.
- P. Identify and understand an ecosystem.
- Q. Identify and understand pollution and prevention methods for it.
- R. Identify and understand the skeleton, the skin, and the brain.
- S. Identify and understand the respiratory system.

Course Materials

See LUOA's [Systems Requirements](#) for computer specifications necessary to operate LUOA curriculum. Also view [Digital Literacy Requirements](#) for LUOA's expectation of users' digital literacy.

This course contains additional physical materials. See the materials page toward the end of this syllabus for a listing of course materials.

This course makes use of third-party digital resources to enhance the learning experience. LUOA staff and faculty have curated these resources. Students can safely access them to complete coursework. Please ensure that internet browser settings, pop-up blockers, and other filtering tools allow for these resources to be accessed. See Technologies and Resources Used in this Course below for a specific list.

- Note: Embedded YouTube videos may be utilized to supplement LUOA curriculum. YouTube videos are the property of the respective content creator, licensed to YouTube for distribution and user access. As a non-profit educational institution, LUOA is able to use YouTube video content under the YouTube Terms of Service. For additional information on copyright, please contact the [Jerry Falwell Library](#).

Technologies and Resources Used in this Course

The following resource(s) are used throughout this course:

- Reading Eggs
- RightNow Media

Course Grading Policies

The student's grades will be determined according to the following grading scale and assignment weights. The final letter grade for the course is determined by a 10-point scale. Assignments are weighted according to a tier system, which can be referenced on the Grades Page in Canvas. Each tier is weighted according to the table below. Items that do not affect the student's grade are found in Tier 0.

Grading Scale

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

Assignment Weights

Tier 0	0%
Tier 1	25%
Tier 2	35%
Tier 3	40%

In order for students to receive credit for a course, the following conditions have to be met:

1. All semester exams and module tests have to be completed,
2. All Tier 3 projects or papers have to be completed, and
3. Fewer than 10 zeros exist in the gradebook for blank submissions in a full credit course and 5 zeros for blank submissions in a semester course.

Course Policies

Students are accountable for *all* information in the Student Handbook. Below are a few policies that have been highlighted from the Student Handbook.

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." These identifiers were placed on the Modules page to help students understand which Honor Code and Resubmission policies apply to that assessment (see the Honor Code and Resubmission policies on the pages that follow for further details).

- **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.

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.
- **Assignment:** Students should do their best work the first time on all Assignments. However, any resubmissions must be completed before the student moves more than one module ahead of that Assignment. For example, a student may resubmit an Assignment from Module 3 while in Module 4, but not an Assignment from Modules 1 or 2. High School students may not resubmit an Assignment without expressed written permission from the teacher in a comment.
- **Quiz:** Students may NOT resubmit for an increased grade.
- **Test:** Students may NOT resubmit for an increased grade.

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, and that request will need to be approved by a Department Chair.

Consequences for Violations to the Honor Code

Every time a student violates the Honor Code, the teacher will submit an Honor Code Incident Report. The Student Support Coordinator will review the incident and allocate the appropriate consequences. Consequences, which are determined by the number of student offenses, are outlined below:

- **Warning:** This ONLY applies to high school Lessons and elementary/middle school Assignments and Lessons. Students should view these actions as learning opportunities.
 - **Lessons:** A zero will be assigned for the question only.
 - **Elementary/Middle School Assignment:** The student must redo his or her work; however, the student may retain his or her original grade.
- **1st Offense:**
 - **Lesson, Quiz, or Test:** The student will receive a 0% on the entire assessment.
 - **Assignment:** The student will either:
 - Receive a 0% on the original assignment
 - Complete the Plagiarism Workshop
 - Retry the assignment for a maximum grade of 80%
- **2nd Offense:** The student will receive a 0% and be placed on academic probation.
- **3rd Offense:** The student will receive a 0% and the Faculty Chair will determine the consequences that should follow, possibly including withdrawal from the course or expulsion from the academy.

Materials List

3rd Grade Science

The following materials are required to successfully complete this course.
Any items marked with * are provided by LUOA through the Canvas course.

All other materials must be purchased separately.

Module 1

Ruler, measuring tape, or yard stick
House items that show weight (grams, oz.,
lb., gal., etc.)

Supplies for optional experiment:

Apples (4)
Cutting board
Knife (adult supervision)
Kitchen scale
Permanent marker
Aluminum foil
Wax paper
Plastic wrap
Zip-lock bags
Refrigerator
Plates

You will be creating a simple or a compound
machine – supplies needed will vary.

Module 2

Optional items:

Poster board
PowerPoint
Cheerios

Optional experiment items:

Baking soda
Vinegar
Empty water bottle
Balloon

You will create a project showing the three
states of matter – supplies will vary.

Module 3

You will demonstrate refraction, reflection,
and shadow – supplies needed will vary.

Opaque, transparent, and translucent
objects from your house.

You will do a science experiment of your
choice – supplies needed will vary.

Module 4

Optional:

Paint
Paper
Cereal box

You will do a science experiment of your
choice – supplies needed will vary.

Module 5

Optional:

Soil to observe
Zip-lock bag (2)
Blue food coloring
Water
Permanent marker

Paper towel

Any seed (apple, lima bean, pumpkin,
etc.) You will create a butterfly –
supplies needed will vary.

Module 6

None

Module 7

You will create an aquatic and terrestrial
ecosystem – supplies needed will vary.

Module 8-10

None

Scope and Sequence

3rd Grade Science

Module 1: Scientific Method

Week 1: Scientific Method
Week 2: Measurement
Week 3: Simple & Compound Machines;
Test

Module 2: Matter

Week 4: Observations: Five Senses
Week 5: Matter
Week 6: Solid, Liquid, Gas

Module 3: Light

Week 7: Heat Energy
Week 8: Reflection, Refraction, Shadow
Week 9: Opaque, Translucent, Transparent
Week 10: Science Experiment; Test

Module 4: Seasons/Moon phases

Week 11: Seasons, Gravity
Week 12: Moon Phases
Week 13: Oceans
Week 14: Science Activity; Test

Module 5: Cycles

Week 15: Living/Non-living Things; Soil
Week 16: Water Cycle
Week 17: Plant Life Cycle
Week 18: Animal Life Cycle; Test

Module 6: Adaptations

Week 19: Behavioral & Physical
Adaptations
Week 20: Herbivore, Carnivore, Omnivore
Week 21: Migration; Test

Module 7: Ecosystems

Week 22: Ecosystems
Week 23: Aquatic Ecosystems
Week 24: Terrestrial Ecosystem
Week 25: More on Ecosystems

Module 8: Resources

Week 26: Renewable & Non-Renewable
Resources
Week 27: Water Pollution
Week 28: Recycling
Week 29: Test

Module 9: Health

Week 30: The Skeleton
Week 31: The Skin
Week 32: The Brain
Week 33: The Respiratory System; Test

Module 10: Misc. Topics

Week 34: Coral Reefs
Week 35: Plants That Bite
Week 36: Hibernating Animals