

Course Syllabus Report



SC151O Science 5

Meets Graduation Requirements: No

Details

Description

Fifth graders will embark on an exciting science adventure. Topics for the year will include Matter is Everywhere, Matter Changing States, Properties of Matter, Mixtures, Gravity, Energy Transfer, Matter and Energy in Plants, Basic Needs, Food Webs, Ecosystems, Matter Cycles, Observing the Stars, Earth's Rotation, Objects in the Sky, Earth's System and Interactions, Water Sources, Human Footprint, and Reducing the Human Footprint.

Ale Course Essential Learnings:

- Develop a model to describe that matter is made of particles too small to be seen.
- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.
- Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
- Make observations and measurements to identify materials based on their properties.
- Conduct an investigation to determine whether the mixing of two or more substances results in new substances.
- Support an argument that the gravitational force exerted by Earth on objects is directed toward the center of the Earth.
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.
- Support an argument that plants get the materials they need for growth chiefly from air and water.
- Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.
- Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.
- Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
- Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Default Ale Certificated Teacher: Jodie Davis

Ale Course is Active: 1

Ale Course is Parent Template: 0

District Approved Curriculum Name:Teacher Created

District Approved Curriculum Name:Mystery Science

State Course Codes:MISC0007 (Elementary Curriculum)

Ale Course Type:NCAA n/a

State Subject Area:Life and Physical Sciences

SIS Course Code: SC1510

Ale Course Grading Scale: Excelling – EX - 3.50-4.00 Meeting – ME - 2.75-3.49 Approaching - AP- 2.00-2.74 Beginning – BE - 1.99 or below

Ale Course Available Credits:

Ale Course Prerequisites:

Ale Course Texts:

Ale Course Additional Resources: Mystery science Web site Legends of Learning

Instructional Materials needed: Internet access, computer, printer, printer paper and ink, modern OS/ software/web browser, webcam, headphones with microphone- if not built into computer, binder, filler paper, tabs, pencil, crayons, scissors, glue, small whiteboard with eraser and markers, camera (cell phone is fine) *Please also see the Material lists for 1st and 2nd Semester in the WSLP Module.

Average Number Of Hours Of Study Per Week:
2.50

Syllabus

Ale Course Syllabus:

iA Science, Fifth Grade

Course Description: SC1510

Scholars will receive a broad overview of many different types of science in order to better understand the world around them through four mystery modules: Chemical Magic, Web of Life, Spaceship Earth, and Water Works. They will develop an understanding of the scientific method and the steps to designing a good experiment. Scholars will become skilled at representing data in graphical forms and developing models for a variety of reasons: including describing the movement of matter.

What We Will Study

Chemical Magic: 5-PS1.1, 5-PS1.2,5-PS1.3, & 5-PS1.4

Web of Life: 5-LS.1.1, 5-LS.2.1, 5-PS.1.1, & 5-PS.3.1

Spaceship Earth: 5-ESS.1.2 &
5-PS.2.1,

Water Works: 5-ESS.2.1,
5-ESS.2.2, 5-ESS.3.1,
5-ETS.1.1, 5-ETS.1.2, &
5-ETS.3.3

Reference Priority Standards and course Learning Plan Contract (LPC) for additional details

Grading & Work Submission

Exceeding 100% – 90%

Meeting 89% - 70%

Approaching 69% - 60%

Beginning 0 - 59%

- Grading standards aligned.
- All work is expected to be turned in by the Monthly Progress Deadline.
- All summative assessments will be graded according to the corresponding rubric or teacher directions.
- Only summative assessment scores will calculate towards a student's final grade.
- Summative assessment are linked to a FWPS Priority Standard (PS).

Objectives

Ale Course Objectives:

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What We Will Study

Chemical Magic: 5-PS1.1,
5-PS1.2, 5-PS1.3, & 5-PS1.4

Web of Life: 5-LS.1.1,
5-LS.2.1, 5-PS.1.1, & 5-PS.3.1

Spaceship Earth: 5-ESS.1.2 &
5-PS.2.1,

Water Works: 5-ESS.2.1,
5-ESS.2.2, 5-ESS.3.1,
5-ETS.1.1, 5-ETS.1.2, &
5-ETS.3.3

Reference Priority Standards and course Learning Plan Contract (LPC) for additional details

Ale Course Standards:

Course is aligned with current Federal Way Public Schools Priority Standards and Washington state standards.

Ale Course Learning Requirements:

Weekly Work Completion: Scholars will submit original work in all classes each week.

Original Work Submissions: Scholars will only submit their original work. If a scholar uses outside sources in the creation of their original work, citations must be present in the format requested by their teacher.

Weekly Communication: Scholars will communicate weekly with their teachers regarding their academic progress.

Functioning Technology/Required Materials: Scholars will always have constant and consistent access to the functioning hardware, software, technology, and required materials necessary to complete their coursework in all classes.

Academic Integrity: Academic integrity is essential to learning. scholars are expected to complete their own work. Copying, plagiarizing, cheating, or other methods of intentional deception are prohibited and could result in the scholar's removal from the class or iA entirely.

IA Policy 1st Offense: The scholar will be contacted by the teacher via phone call, the scholar will be made aware of the plagiarism and examples of how this can be avoided will be discussed. Direct instruction on plagiarism will be delivered by the teacher. iA Administration and other teachers will be made aware of the plagiarism. The work must be redone without plagiarism.

2nd Offense: The scholar and parents will be contacted by the teacher directly and the scholar will have to complete the plagiarized assignment without plagiarism before moving on in the course. iA Administration will be made aware.

3rd Offense: The scholar will be withdrawn from the course or iA depending on the severity and/or frequency of the plagiarism.

WAC (Weekly Academic Contact): State regulations require scholars in online programs to have weekly academic contact with each teacher. This occurs by engaging with the curriculum and online instruction, submitting assignments to make progress in learning, and successfully completing courses. Scholars have multiple opportunities and methods to achieve weekly academic contact and receive teacher assistance and feedback: email, message, live online sessions, assignments, phone, and/or face-to-face meetings by appointment

when applicable and in accordance with social distancing guidelines.
In accordance with new state law the iA Weekly Academic Contact policies are changing. To ensure the success of all iA scholars, Weekly Academic Contact is required to remain enrolled at iA.
1st week missed WAC= Notification of missed WAC that informs scholars and parents of the consequences of additional missed WAC.
(Step 1)
2nd consecutive or 3rd cumulative week of missed WAC= The scholar and parent must conference with a designee to discuss the missed contact, administer a “screener”, and develop a data-based interventions plan. (Step 2)
5th consecutive OR 6 cumulative of missed WAC= BECCA petition will be filed. (Step 3)

Ale Course Academic Goals:

Grade Level:

Standard Selections:

- Develop a model to describe that matter is made of particles too small to be seen.
- Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
- Make observations and measurements to identify materials based on their properties.
- Conduct an investigation to determine whether the mixing of two or more substances results in new substances.
- Support an argument that the gravitational force exerted by Earth on objects is directed down.
- Use models to describe that energy in animals’ food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.
- Support an argument that plants get the materials they need for growth chiefly from air and water.
- Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- Support an argument that the apparent brightness of the sun and stars is due to their relative distances from the Earth.
- Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.
- Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
- Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.

Activities

Ale Course Learning Activities:

Activity Selections

- Projects.
 - Activities.
 - Private Lessons.
 - Experiments.
 - Hands-on Projects.
 - Discussion.
 - Journaling.
 - Internet Research.
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Evaluation

Ale Course Evaluation Methods:

Monthly Progress Review (MPR)

Each month teachers decide whether a scholar is making Satisfactory or Unsatisfactory progress in each course. Then the homeroom/advisory teacher will determine if scholar is overall Satisfactory or Unsatisfactory for the month.

Secondary (6-12) - to be overall SATISFACTORY for the month, a scholar must be passing half or more of their courses with a 70% or better grade (9-12 letter grade of A, B or C; 6-8 grade of EX or ME)

Elementary - to be SATISFACTORY, a scholar must score at least 70% or above with 75% assignment submission in 4 core classes (ELA, SCI, SS, Math)
If a scholar has Unsatisfactory Progress for the month the advisor or homeroom teacher will create an intervention plan communicated in the ALE App.

Three consecutive months of Unsatisfactory Progress will result in a course reduction - which may affect graduation for high school scholars.

Four consecutive months of Unsatisfactory progress will result in complete withdrawal from iA. Scholars withdrawn from iA for Unsatisfactory progress may not re-enroll until the following school year.

Timelines:

September Timeline:

Complete all lessons and assignments in the September module on your "modules" page in Canvas.

October Timeline:

Complete all lessons and assignments in the October module on your "modules" page in Canvas.

November Timeline:

Complete all lessons and assignments in the November module on your "modules" page in Canvas.

December Timeline:

Complete all lessons and assignments in the December module on your "modules" page in Canvas.

January Timeline:

Complete all lessons and assignments in the January module on your "modules" page in Canvas.

February Timeline:

Complete all lessons and assignments in the February module on your "modules" page in Canvas.

March Timeline:

Complete all lessons and assignments in the March module on your "modules" page in Canvas.

April Timeline:

Complete all lessons and assignments in the April module on your "modules" page in Canvas.

May Timeline:

Complete all lessons and assignments in the May module on your "modules" page in Canvas.

June Timeline:

Complete all lessons and assignments in the June module on your "modules" page in Canvas.