SC103O/ Science 7.1 Syllabus

Course Title------	Science 7.1
Course Number------	SC103O
Grades:------	07-07
High School Credit Value:------	0
Prerequisites:------	N/A
Course Length:------	Regular courses: 17 weeks CR: 9-17 weeks.
Course Time:------	Regular courses: 17 week schedule: 75 - 90 minutes per school day (6-7.5 hours per week) Credit Retrieval: 75 - 90 minutes per school day (6-7.5 hours per week) until course completion.

{ Course Description }

As an introductory science course, this class hopes to inspire you to be curious and learn to enjoy the exploration scienc encourages. Along with the experiments and topics, students will work with many new terms and concepts that will expand their worlds and make science a part of everyday experience. Science study skills in this class are designed to be transferred to studies in science in the years ahead.

Science 7 is a full-year science course offering a broad introduction to the scientific method, scientific measurement and basic science concepts, as well as Earth science, cell biology and natural resources. Second semester includes experiments exploring energy and light. Students learn to write a formal lab experiment applying the concepts of dependent and independent variable and control. The flow of energy through nutrient cycles is investigated through the study of food chains and webs.

Activities: Students will be doing research online, performing and designing experiments, and writing up formal research papers. Some of the activities are on the computer, others are completed in the kitchen and then the formal write up is sent via e-mail. Many of the projects are done "hands-on" with the final product being mailed to the Internet Academy office.

Course Materials:
You will need a small candle, matches/lighter, ruler - metric, candle holder, sand, plastic or paper cups, teaspoon or tablespoon, salt, plaster, and soil. Most of these items have substitutes, contact the teacher if you need to use something else.

State Alignments
Washington State Standards guided the design of the course. Learning expectations are found within the course itself.

Common Core or Power Standard #	Description of Standard	Units	Assessment Formative (Practice)	Summative (Performance)
PS 1	The output of one system can become the input of another system. (6-8 SYSC)	3, 6, 11	3.2.0, 3.3.0, 6.2.0, 6.3.0, 11.4.0	3.2.1, 3.3.1, 6.2.1, 6.3.1, 11.4.2, 11.4.3
PS 2	Collecting, analyzing, and displaying data are essential aspects of all investigations. (6-8 INQC)	1, 2, 7, 11, 12	1.2.0, 7.1.0, 12.4.0, 12.5.0, 1.6.0, 2.2.0, 11.3.0	1.2.2, 1.6.1, 2.2.2, 7.1.1, 11.3.4, 12.4.1, 12.5.1
PS 3	For an experiment to be valid, all (controlled) variables must be kept the same whenever possible, except for the manipulated (independent) variable being tested and the responding (dependent) variable being measured and recorded. If a variable cannot be controlled, it must be reported and accounted for. (6-8 INQD)	1, 2, 11	1.2.0, 1.5.0, 1.6.0, 2.2.0, 11.4.0, 11.3.0	1.2.1, .1.2.2, 1.5.1, 1.6.1, 2.2.2, 11.3.4, 11.4.2
PS 4	Models are used to represent objects, events, systems, and processes. Models can be used to test hypotheses and better understand phenomena, but they have limitations. (6-8 INQE)	1, 2, 3, 11, 12	1.2.0, 1.6.0, 2.6.0, 3.2.0, 11.4.0,	1.2.1, 1.2.2, 2.6.1, 3.2.1, 3.3.1, 11.4.2,

			12.1.0,12.2.0	12.1.1, 12.2.1
PS 5	It is important to distinguish between the results of a particular investigation and general Conclusions drawn from these results. (6-8 INQF)	1, 10	1.2.0, 10.1.0, 10.2.0, 10.3.0	1.2.1, 1.2.2, 10.1.1, 10.1.2, 10.2.2, 10.2.3, 10.3.1
PS 6	Scientists and engineers often work together to generate creative solutions to problems and decide which ones are most promising. (6-8 APPE)	4	4.1.0, 4.2.0	4.1.1, 4.1.2, 4.1.3, 4.2.1
PS 7	Earth is the third planet from the sun in a system that includes the Moon, the Sun, seven other major planets and their moons, and smaller objects such as asteroids, plutoids, dwarf planets and comets. These bodies differ in many characteristics (e.g., size, composition, relative position). (6-8 ES1B)	2	2.2.0, 2.3.0, 2.5.0	2.2.1, 2.3.1, 2.5.1
PS 8	Most objects in the Solar System are in regular and predictable motion. These motions explain such phenomena as the day, the year, phases of the Moon, and eclipses. (6-8 ES1C)	2	2.2.0, 2.3.0, 2.5.0	2.2.1, 2.3.1, 2.5.1
PS 9	The Sun is the major source of energy for phenomena on Earth's surface, such as winds, ocean currents, and the water cycle. (6-8 ES2B)	3, 5, 6	3.2.0, 3.3.0, 5.1.0, 5.2.0, 6.2.0, 6.3.0	3.2.1, 3.3.1, 5.1.1, 5.2.1, 6.2.1, 6.3.1,
PS 10	In the water cycle, water evaporates from Earth's surface, rises and cools, condenses to form clouds and falls as rain or snow and collects in bodies of water. (6-8 ES2C)	6	6.2.0, 6.3.0	6.2.1, 6.3.1
PS 11	The crust is composed of huge crustal plates on the scale of continents and oceans which move centimeters per year, pushed by convection in the upper mantle, causing earthquakes, volcanoes, and mountains. (6-8 ES2F)	2, 7	2.2.0, 2.3.0, 2.5.0, 2.6.0, 2.6.2, 2.7.0, 7.1.0	2.2.1, 2.3.1, 2.5.1, 2.6.1, 2.6.2, 2.7.1, 7.1.1
PS 12	The rock cycle describes the formation of igneous rock from magma or lava, sedimentary rock from compaction of eroded particles, and metamorphic rock by heating and pressure. (6-8 ES2H)	2, 3	2.2.0, 2.3.0, 3.1.0	2.2.2, 2.3.1, 3.1.1
PS 13	Our understanding of Earth history is based on the assumption that processes we see today are similar to those that occurred in the past. (6-8 ES3A)	2	2.2.0, 2.3.0, 2.4.0, 2.6.0	2.2.1, 2.3.1, 2.4.1, 2.6.1, 2.6.2
PS 14	Earth has been shaped by many natural castastrophes, including earthquakes, volcanic eruptions, glaciers, floods, storms, tsunami,and the impact of asteroids. (6-8 ES3D)	2, 7	2.5.0, 2.6.0, 2.7.0, 7.1.0	2.5.1, 2.6.1, 2.6.2, 2.7.1, 7.1.1
PS 15	Landforms are created by processes that build up structures and processes that break down and away material trough erosion and weathering. (6-8 ES2g)	2	2.2.0, 2.3.0, 2.4.0, 2.5.0, 2.6.0, 2.7.0	2.2.1, 2.3.1, 2.4.1, 2.4.2, 2.5.1, 2.6.2, 2.7.1

Course Outline

First Semester: 17 Weeks

- Unit 1 Scientific Method 5 weeks
- Unit 2 Earth Science 4 1/2 weeks
- Unit 3 Earth Systems 1 1/2 weeks
- Unit 4 Careers and Technology 1 1/2 weeks
- Unit 5 Natural Resources 1 1/2 weeks
- Unit 6 Weather and Climate 1 week
- Unit 7 Research Project 2 weeks

Second Semester: 17 Weeks

- Unit 1 Science Concepts 4 weeks
- Unit 2 Energy 3 weeks
- Unit 3 Waves 3 weeks
- Unit 4 Cells 3 weeks

- Unit 5 Flow of Energy 4 weeks

Course Work

Students are expected to put in 6-8 hours per week to complete their lessons.
Lessons should be turned in as soon as they are completed and not turned in all at one time.
Lessons should be submitted in Angel in most cases and exceptions must be approved by the instructor in advance.

Grading

Lesson assignments will be graded using the following criteria:

1. Proper spelling and grammar should be used at all times.
2. Responses need to be in complete sentences.
3. Lab write-ups should follow the standard format provided in the course.
4. Students must write answers in their own words. All lesson answers should be paraphrased from the information in the sources. Copying and pasting from sources (plagiarism) will not be tolerated.

Projects will be graded using the following criteria:

1. Directions from the lesson were carefully followed for each project.
2. **Bibliographic citation** of all web resources including the URL, name of the web site, and author or editor if available are included in the project. Credit is given for the photographs used and quotations included in the project.
3. Student has completed his/her own original work. Copying or plagiarism will not be tolerated. Plagiarism may result in no credit given for the lesson or project.

Weekly On-line Office hours open to students and parents are held several times a week providing information and help. Students are expected complete 2 or more assignments, ask questions, and respond to comments every week.
Assignments are corrected as quickly as possible. A student should continue to complete and send in the next assignment(s) as he/she waits for the teacher's response.
Grades for assignments that have been corrected are automatically posted.

Occupational Credit:

This course may qualify for *occupational credit. Please consult your school counselor for further clarification.
*Please note that FLA901 (Sign Language) does not qualify for occupational credit.