

# 8<sup>th</sup> Grade Integrated Science

Salt Lake Arts Academy 2011-2012

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## **COURSE DESCRIPTION:**

We will be following the State of Utah 8th Grade Integrated Science Core Curriculum which focuses on the theme of **CHANGE** as it relates to **matter** and **energy**. This theme will be studied as a concept common to life science, earth science and physical science. **A hands-on, student-as-scientist approach will be emphasized.** (In other words this class will be FUN!). A few field trips will also be included. There will be a required State Science Test (CRT) at the end of the year. Get ready to participate, study, work hard and have a lot of fun!

*Below is a brief outline of our units for the year. \*\*If you would like to see the complete, detailed list of standards, objectives and vocabulary you may access it at:*

<http://www.uen.org/cc/uen/core/pub/displayCoreCourse.action?cclid=3240>

### **Unit 1: Ecology and Ecosystems (Standard II)**

- Photosynthesis and respiration
- Energy flow in food chains and food webs
- Human influences on the environment

### **Unit 2: Rock and Fossil Formation (Standard III)**

- Rocks, minerals and the rock cycle
- How rock and fossil evidence infer Earth's history
- Changes in the Earth's surface (earthquakes and volcanoes)

### **Unit 3: Changes in Matter (Standard I)**

- Chemical and physical properties of substances
- Chemical and physical changes / chemical reactions
- Effects of increasing or decreasing amounts of energy
- How scientists and engineers apply chemistry to applications in daily life

### **Unit 4: Forces and Motion (Standard IV)**

- Transfer of energy through various materials
- Gravity
- Simple Machines
- Conversion of Energy (Potential / Kinetic; Chemical / Mechanical)
- How living organisms sense and respond to various types of energy

- How engineers have developed devices to sense various types of energy

## **INSTRUCTIONAL MATERIALS:**

### **Reading:**

No formal textbook. I will assign relevant readings from various sources including: subject-specific booklets, Internet resources, journal articles, books and magazines.

### **Science Binder:**

I expect you to bring your science binder to class **EVERY TIME**. (If you use the same binder for multiple classes you must have a section dedicated to science class.) *Should include sections for:*

- Permanent reference material – Colored Paper, Keep all year long
- Notes
- Labs
- HW Assignments
- Graded work – (I urge keep these in a safe place at home)
  - Use it to prove your scores if there is a grading mistake or computer failure that affects the grade book.

*KEEP ALL THESE ITEMS ORGANIZED AND USE THEM TO HELP YOU PREPARE FOR QUIZES AND TESTS.*

### **Note Taking:**

Bring notepaper and a working pen or pencil to science class **EVERY TIME**. Take notes in class and study them later that day for a few minutes. This will help you retain the important things we learned about in class.

## **HOMEWORK ASSIGNMENTS:**

Homework assignments will play a BIG part in your learning. It takes practice and repetition to master new concepts. It is NOT busy work – it is ESSENTIAL work!

1. **WHAT TO EXPECT:** worksheets, readings, lab write-ups or reflections, Internet activities, projects, science research/reports, home experiments. **Expect several assignments a week.**
2. **ON TIME:** I expect you to be responsible, completing assignments and turning them in on time. Don't wait until the "last minute" as some projects will take several days to complete. **If the assignment is not ready at the first of class on the due date, it is considered late.** You may also submit assignments via email when possible.
3. **LATE WORK POLICY:** **Late homework assignments can get no higher than a 3. Work more than 2 weeks late will NOT be accepted and will receive a ZERO for the assignment.** PEPR score will be lowered.
4. **INCOMPLETE WORK:** I expect your best, complete work. **Incomplete work will be returned ungraded for a redo & will be considered late.**
5. **NO NAME POLICY:** I expect you to put your **name** (first and last) and your **period** on EVERYTHING you turn in (including in-class labs / activities). *This demonstrates responsibility and also shows sensitivity for person who will be giving you feedback*

on your work and entering a grade into the computer system. I have 7 periods and ~150 students to keep track of. **If you leave your PERIOD off, it creates additional work for me and you will lose points on the assignment. A NO NAME will get a zero and be recycled.** (At the first of the year, I may choose to give an opportunity to claim a no name, but by second semester there will be no second chances.) You did the work. Make sure you get credit for it by putting your name and period on it.

6. **ALTERNATE ASSIGNMENT OPTION:** If you feel that a particular assignment does not challenge you enough, you may propose an alternate assignment along the same topic that would be more interesting / motivating for you. Once given the okay by the teacher your proposed assignment would take the place of the original assignment. *This option will be handled on a case-by-case, individual basis. Please come talk to me or email me. I will provide more details as necessary.*
7. **EXTRA CREDIT OPPORTUNITIES:** Throughout the year I will provide special extra credit opportunities, but at any point in the year you may gain extra credit by **investigating science topics we cover in class on a deeper level at home.** This could come in the form of reading science related books, building projects, creating poems, songs, jokes, dances, or videos to help teach a science concept from class, etc. *Points will depend on level of effort and connection/usefulness to in-class learning. Come talk to me or email me to work out details.*

### **GRADING:**

Grades are based on an accumulation of total points earned that will then be converted to a percentage of total points possible. These percentages will be converted into a 1-5 rubric scale. (SEE RUBRIC IN BINDER OR ONLINE)

#### **Grading Scales:**

Academic:	<u>95%(5)</u>	<u>90%(4.5)</u>	<u>83%(4)</u>	<u>78%(3.5)</u>	<u>65%(3)</u>	<u>60%(2.5)</u>	<u>50%(2)</u>	<u>&lt;50%(1)</u>
CAB	<u>95%(5)</u>		<u>77%(4)</u>		<u>57%(3)</u>		<u>35%(2)</u>	<u>&lt;35%(1)</u>
PEPR	<u>95%(5)</u>		<u>77%(4)</u>		<u>57%(3)</u>		<u>35%(2)</u>	<u>&lt;35%(1)</u>

#### **How to calculate your grade for assignments and tests:**

FORMULA: points you got  $\div$  points possible = \_\_\_\_\_ X 100 = \_\_\_\_\_ %

EXAMPLE: Score on assignment 33/40

$$33 \div 40 = 0.825 \times 100 = 82.5\% \Rightarrow (4)$$

#### **What this grading style means for you:**

Your grade is NOT totally dependent on tests. As long as you attend class, actively participate and put good effort into completing all the assignments, you will not only learn a

lot, but you'll still get a good grade even if you don't do as well on tests. This also means that you cannot pass my class by only doing well on tests and not doing the homework.

## **WE'RE ONLINE:**

**Using your Google account (Mail, Docs, Calendar) and checking your grades online is MANDATORY for science class.**

Assignments, handouts, due dates, upcoming events and grades for tests and assignments are all available online and I expect you to take advantage of these resources BEFORE you come talk to me about questions, problems or make up work.

### **1. GOOGLE ACCOUNT LOGIN:**

Go to <https://mail.google.com/a/slarts.org> or [www.gmail.com](http://www.gmail.com)

Login: *yourloginname@slarts.org*

Password: *your password*

- 2. EMAIL:** Check this daily. I will often send email updates or reminders.
- 3. DOCS:** Folders shared with me (lower left) -> Click the Science Folder that applies to our class. Assignments and Handouts by Unit are found here. This will be especially useful if you missed a class or your grades show you are missing an assignment. You can come here to find that assignment and complete it. I will also post answer keys to assignments and tests here after they have been handed back so you can check your work on your own.
- 4. CALENDAR:** Check this daily. You are responsible to stay up to date on what we are doing in class. Assignments, due dates, tests, and important events will be posted here. If you miss a class session I expect you to use the online resources to get the things you missed and complete them BEFORE you come to the next class.
- 5. CHECKING YOUR GRADES ONLINE:** You cannot access your grades through the Goggle account. Go to [www.saltlakeartsacademy.org](http://www.saltlakeartsacademy.org) --> classrooms --> Michael Clark --> grades --> select your period from the drop down menu --> type you name as instructed --> enter the same password you use for email → check your progress. If you are missing an assignment, get it from Google docs and turn it in ASAP. If there is a grading discrepancy, please email me or talk to me outside of class time.

## **SUMMARY OF STUDENT EXPECTATIONS:**

1. Attend each class and participate full in class discussions, group work and labs.
2. Come to each class period fully prepared and ready to learn (Science notebook, paper, sharpened pencil, completed HW.) & turn work in on time with name and period at the top.
3. Respect the rights and property of others.
4. Follow all lab safety rules and posted and discussed in class.
5. Follow the rules written in the SLAA student handbook.
6. Listen and follow instructions for all activities and labs.
7. Take personal responsibility for your own learning process and makeup work.
8. No Cell Phones, MP3 players, iPods, Game Players, etc. in class unless instructed by the teacher to bring them for a specific activity.

