

Science 6: 2009-2010

Instructor:

Mr. Ryan Randolph

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Contact Information:

Monday-Friday

7:45am-3:15pm

Conference Time:

1:30pm-2:20pm

Course Description

This course integrates life and earth science in varying sequence. Concepts from each area will be integrated among the other science areas and with other disciplines as well. Topics include simple organisms, plants, animals, plate tectonics, and other areas to cover all grade-level indicators for the 6th grade as outlined in the Ohio Academic Standards for science

Course Textbooks/Materials

Prentice Hall Science Explorer: *From Bacteria to Plants*

Prentice Hall Science Explorer: *Inside Earth*

Prentice Hall Science Explorer: *Animals*

Course Topics/Objectives

See the Ohio Academic Standards for Science.

Course Policies

Tardiness:

Students must be in the classroom and in their seat at the start of class. Students in the classroom but not in their seat will still be counted as tardy. Students arriving more than fifteen (15) minutes late for class will be considered absent for that class period. After three (3) late arrivals to class, a student will be issued a detention as punishment for their tardiness. Late arrivals do accumulate from one grading period to the next.

Attendance:

All TSA courses require no more than eighteen (18) days of absence occur in a year for students to receive credit for that course. Students arriving more than fifteen (15) minutes late to their first class may be considered absent for that class. The school will notify the student and parent/guardian when ten (10) days of absence have occurred. The student and parent/guardian will be notified by the school of loss of credit at nineteen (19) days of absence and loss of credit for the course. If a student receives a notice of loss of credit, they may file a reinstatement petition with the principal.

Preparedness:

All students are expected to come to class fully prepared. This, at the very minimum, includes bringing all of the following items to class: Textbook(s), binders, loose-leaf paper, pencils (Four (4) sharpened by the start of class), pens (blue or black ink, additional red pens for corrections), and a student agenda book. Failure to come to class prepared will follow the same disciplinary process as tardies to class.

Basic Requirements for Assignments:

- 1) **All assignments completed on student-supplied paper will be done on loose-leaf paper.** Papers ripped out from notebooks (unless cleanly done along a perforation) will not be accepted. Assignments not done on acceptable paper will be returned to the student to be redone for credit, following the rules for late work..
- 2) **Papers must be properly headed.** This should include the following: Name, period, date, (and assignment, if done on loose-leaf paper). Papers with no name on them will be immediately placed in the return box, leading to a grade of zero (0) on the assignment for the student who failed to put his/her name on their assignment. If it is returned with the student's name on it, it will receive credit following the procedures of a late assignment (see below). If any other specified information is missing, loss of points on the assignment can result.
- 3) **Assignments must reflect the student's best work, especially in neatness.** Any work done in a level of neatness not acceptable to the teacher will result in the assignment being handed back to the student to re-do. If the student fails to re-do the assignment to an acceptable level of neatness, the student will receive a grade of zero (0) for the assignment.

Late/Incomplete Work:

Assignments are due at the beginning of class on the due date. Any work turned in one day later will receive an automatic 75% reduction. Two (2) days late will receive an automatic 50% deduction. No work will be accepted beyond this. Homework that is partially completed will not be accepted. All missing/incomplete assignments will automatically receive zero (0) points. The only exceptions to this rule are in the cases of excused absences (as outlined below) and in extenuating circumstances on a case-by-case basis (i.e. legitimate personal or family emergencies). If you would need an extension, you must obtain permission and a signature from the teacher on the homework assignment itself. A detention will be issued for every three assignments missed or late. Three detentions will result in a blue slip (Office referral) and a meeting with the principal..

Make-up tests/quizzes/presentations:

Make-up tests/quizzes/presentations will be given during class the day the student returns to school (unless pertinent material is missed).

Make-up work:

You have the same number of days you were absent to turn in work. It is the student's responsibility to get the lesson plan from the day(s) he or she was absent from the teacher.

Ex. The student is absent on Monday and Tuesday. The assignments are due on Friday at the beginning of class.

“Whatever” Passes:

Three “whatever” passes will be given at the beginning of each grading period. You may use this pass to use the restroom, retrieve homework from your locker, or any other valid reason for leaving the room. Students have four minutes between classes to use the restroom. If there is a special concern (i.e., medical condition), the parent or guardian needs to contact the nurse or the instructor of this course.

Students must present a “whatever pass” and an agenda book with his or her name to leave the classroom. Agendas with folded or torn pages will not be accepted.

Drinking/Eating:

There will be no food or drinks allowed in the classroom, unless explicit permission is given. A detention will be issued as immediate punishment to any student bringing any food or beverage into the classroom without permission, whether it is sealed or not.

Communication:

Students are expected to treat every member of the school community with respect. Proper grammar should be used during instruction time and on all assignments. Students and parents are encouraged to communicate with the instructor by phone, E-mail, letter, or in person (which must be scheduled in advance)

Expectations for the Students:

1. Be on time and bring all necessary materials to class.
2. Be respectful and polite to class members, faculty, staff, and visitors
3. Follow all instructions after the first time that they are given.
4. Raise your hand to speak (unless instructed otherwise).

Course Requirements/Statement of Expected Mastery

Students are expected to attend class regularly (see attendance policy). Loss of credit could occur for any student that does not meet the attendance policy. In addition, loss of credit will result when any student receives a year average of 64% or below.

Grading Scale					
A+	98-100%	C+	80-82%	F	0-64%
A	95-97%	C	77-79%		
A-	92-94%	C-	74-76%		
B+	89-91%	D+	71-73%		
B	86-88%	D	68-70%		
B-	83-85%	D-	65-67%		

Grading System

The grading system is based on a point system. Each assignment is assigned a point value, and the accumulated points are then converted into a percentage. Grades will not be “weighted” or “curved”.

To calculate the semester and final yearly averages:

Each six-week grading period is worth 30% of the total semester grade, with the semester exam being worth 10% of the total semester grade. The average of the two semester grades is taken to determine the final yearly grade. This can also be interpreted as each semester exam being worth 5% of the final yearly grade, with each six-week grading period being worth 15% of the final yearly grade.

Assessment Procedures:

All students are expected to follow the Toledo School for the Arts academic honesty policy. Students who violate this policy will receive a loss of credit on the assignment. Students will be assessed using a variety of methods. Rubrics will be used to assess achievement on most oral and written assignments. Tests and quizzes will be used to assess achievement on reading assignments. "Partial" credit will not be given for specific assignments or the course.

Ohio Academic Content Standards – Science Grade Six

Earth and Space Sciences

- Earth Systems*
1. Describe the rock cycle and explain that there are sedimentary, igneous and metamorphic rocks that have distinct properties (e.g., color, texture) and are formed in different ways.
 2. Explain that rocks are made of one or more minerals.
 3. Identify minerals by their characteristic properties.

Life Sciences

- Characteristics and Structure of Life*
1. Explain that many of the basic functions of organisms are carried out by or within cells and are similar in all organisms.
 2. Explain that multicellular organisms have a variety of specialized cells, tissues, organs and organ systems that perform specialized functions.
 3. Identify how plant cells differ from animal cells (e.g., cell wall and chloroplasts).
- Heredity*
4. Recognize that an individual organism does not live forever; therefore reproduction is necessary for the continuation of every species and traits are passed on to the next generation through reproduction.
 5. Describe that in asexual reproduction all the inherited traits come from a single parent.
 6. Describe that in sexual reproduction an egg and sperm unite and some traits come from each parent, so the offspring is never identical to either of its parents.
 7. Recognize that likenesses between parents and offspring (e.g., eye color, flower color) are inherited. Other likenesses, such as table manners are learned.
- Diversity and Interdependence of Life*
8. Describe how organisms may interact with one another.

Physical Sciences

- Nature of Matter*
1. Explain that equal volumes of different substances usually have different masses.

2. Describe that in a chemical change new substances are formed with different properties than the original substance (e.g., rusting, burning).
3. Describe that in a physical change (e.g., state, shape and size) the chemical properties of a substance remain unchanged.
4. Describe that chemical and physical changes occur all around us (e.g., in the human body, cooking and industry).

Nature of Energy

5. Explain that the energy found in nonrenewable resources such as fossil fuels (e.g., oil, coal and natural gas) originally came from the sun and may renew slowly over millions of years.
6. Explain that energy derived from renewable resources such as wind and water is assumed to be available indefinitely.
7. Describe how electric energy can be produced from a variety of sources (e.g., sun, wind and coal).
8. Describe how renewable and nonrenewable energy resources can be managed (e.g., fossil fuels, trees and water).

Science and Technology

Understanding Technology

1. Explain how technology influences the quality of life.
2. Explain how decisions about the use of products and systems can result in desirable or undesirable consequences (e.g., social and environmental).
3. Describe how automation (e.g., robots) has changed manufacturing including manual labor being replaced by highly-skilled jobs.
4. Explain how the usefulness of manufactured parts of an object depend on how well their properties allow them to fit and interact with other materials.

Abilities To Do Technological Design

5. Design and build a product or create a solution to a problem given one constraint (e.g., limits of cost and time for design and production, supply of materials and environmental effects).

Scientific Inquiry

Doing Scientific Inquiry

1. Explain that there are not fixed procedures for guiding scientific investigations; however, the nature of an investigation determines the procedures needed.

2. Choose the appropriate tools or instruments and use relevant safety procedures to complete scientific investigations.
3. Distinguish between observation and inference.
4. Explain that a single example can never prove that something is always correct, but sometimes a single example can disprove something.

Scientific Ways of Knowing

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| <i>Nature of Science</i> | 1. Identify that hypotheses are valuable even when they are not supported. |
| <i>Ethical Practices</i> | 2. Describe why it is important to keep clear, thorough and accurate records. |
| <i>Science and Society</i> | 3. Identify ways scientific thinking is helpful in a variety of everyday settings. |
| | 4. Describe how the pursuit of scientific knowledge is beneficial for any career and for daily life. |
| | 5. Research how men and women of all countries and cultures have contributed to the development of science. |