

Class Policies - Honors Biology

Name:

Science - Mr. Pesce Room 014

(802) 447-7511 x 314

E-mail: vpesce@svsu.org

Date:

Block #:

You are a scientist. I enjoy learning with fellow scientists. I assume that each student entering this room wants to be a scientist, and I will help that person be a better scientist. A scientist respects all that the world is. A respectful person will not often encounter the limitations of rules. You are expected to know the general policies of Mt. Anthony High School as well as the specific policies of this classroom. Most of all: Accept nothing less than dignity and respect for everyone.

Come to class on time and prepared to do well. Bring:

Pen (black ink)

Pencil (#2 black lead) with eraser

3-ring binder (notebook) - 2" size recommended

Supply of lined 8.5 x 11" loose-leaf paper

Current assignments

Other supplies that aid learning

Written work and assignments are expected be:

Neat - clean paper, heading (Name, date, class and block), margins, and black ink

Legible - Standard Written English, printed or typed if handwriting is not readily legible

Complete - all questions and parts of the assignment attempted if not completed

Thoughtful - evidence of listening, reading, and thinking about the topic

On-time - Late work loses points. Work not done within a week may earn a zero.

Reading and Homework Assignments:

Students are expected to read and take notes from the assigned material. Students need a quiet place to spend at least 45 minutes **per class day** reading and doing written assignments. Expect to read a chapter or more per week.

Make up work: (All work is required. Unexcused late work does not earn full credit.)

Students are responsible for completing **all** assignments. One week is given for work missed due to an excused absence. Extra help is available on Thursdays from 2:10 to 2:45 pm and most other days from 2:10 to 2:30 pm. **All assigned work is required**, so don't try to make excuses, negotiate reductions, or bargain for extensions; just do the work ASAP. *Provide a written note attached to your completed assignment if you want me to consider not taking off points for being late.*

Classwork not finished in class is usually due the next day.

Binders/notebook:

Each student is expected to keep a well-organized binder/notebook. The binder/notebook is graded for completeness and organization. **All items** including handouts, homework, quizzes, tests, class notes and reading notes **are to be dated and kept in chronological order**. Well done outline notes from reading, lecture, and class discussions are expected from all students.

Lab and Class Activities:

There are two components to lab and class activities. 50% of the grade is participation in the activity and 50% of the grade is based on the write-up or lab report. Once the written portion is complete the lab or activity grade is between 50% and 100% depending on the quality of the written work. Only by deliberately refusing to do work would a lab grade be below 75%.

Tardiness:

Students are expected to be seated and ready to begin before the bell rings. Unexcused tardiness has consequences, including loss of points on class participation grade, teacher after-school detention, loss of credit for missed in-class assignments, and missed opportunity to learn the material. Students with excessive tardiness will be referred to the office. (Please review handbook.)

Grading:

Each assignment is given a point value. Points accumulate over the course of the semester. Your percent grade is the number of points earned divided by the points possible. Point values range from five points for a short homework assignment to 200 points for a major project. Lab activities, quizzes and tests are usually 30-50 points each. Approximate breakdown of graded work is as follows.

35% Lab and class activities, and written work, including a well-organized binder/notebook

20% Two Major Projects (Nature Journal or Plant project; Animal Project)

20% Quizzes, chapter assessments, worksheets, essays and graphs, small projects

15% Homework based on text readings

10% Class participation (including behavior, tardiness, and preparedness)

Behavior:

A student is expected to behave respectfully and responsibly at all times. At no time is ridiculing, humiliating, or intimidating behavior acceptable, in either verbal or physical form.

It is especially important in a science lab or field setting to respond quickly and thoughtfully to directions. Everyone must be careful in a lab setting. **Carelessness is not an option; throwing any object, pushing, shoving, or inattention to directions is not acceptable.** Even water, when spilled, can be dangerous. Talk to each other in ways that encourage communication. Rude or inappropriate language will result in points taken from the participation grade. If necessary, teacher detention is served on the afternoon of the next school day or at my discretion.

Please ***no food or drink during class time***. Put away walkmans, headphones, cell phones, I-pods, hats, and all non-academic materials.

I have read the above class policies and will treat others with respect and dignity. I will be careful with all materials and help maintain a clean and organized classroom.

Student Signature: _____ Date: _____

I have received a copy of the Class Policies.

Parent/guardian Signature: _____ Date: _____

Help sessions are Thursdays from 2:10 to 2:45 pm. (most other days from 2:10 to 2:30 by request)

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There is a final exam worth 20% of the final grade.

Honors Biology - Mt. Anthony High School

Mr. Pesce

Philosophy: Biology attempts to develop students' knowledge and understanding of organisms and the interactions among organisms within the environment. This can best be accomplished when students learn science by doing science. The inquiry approach asks students to go beyond memorization of terms and concepts. There is need for a solid base of factual information, which can be learned within the context of scientific methods of observation, modeling, experimentation, communication, analysis and critical thinking. We emphasize the following themes.

- The nature of scientific inquiry
- Interaction and interdependence in living systems
- Unity within diversity
- Homeostasis: maintaining dynamic equilibrium in Living Systems
- Evolution: patterns and products of change in living systems
- Energy, matter, and organization
- Continuity: reproduction and inheritance in living systems

"There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one: and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and wonderful have been, and are being, evolved."

Charles Darwin (1859, *On The Origin of Species*)

5. Theory of Evolution: how diversity and variation of organisms changed over time
6. Unicellular Organisms: Archaeobacteria, Eubacteria, Protozoa, Algae
7. Plants: Structure and function of multicellular producers in the food web
8. Animals: Invertebrate and Vertebrate structure and function
9. The Human Body: Function and structure of the main organ systems

Biology reflects the Vermont Framework of Standards and Learning Opportunities:

1. Communication skills: Reading for content; writing, visual, and oral presentations of data
2. Reasoning and problem solving in lab, class, field, group, and individual, settings
3. Personal development
4. Knowledge of science, math, and technology

Materials:

Text: Solomon, Eldra Pearl, Linda Berg, and Diana W. Martin. *BIOLOGY, fifth edition*. Fort Worth: Harcourt College Publishing. 1999

Videos, CD, transparencies and lab handouts.

Laboratory equipment and supplies: Microscopes, dissection tools, glassware, collecting trays, chemicals, and safety equipment

Organisms: Living and preserved, commercial supplier and self on-site collections

Computers: Writing, research, and organizing data

Notebook: a collection of notes, ideas, visuals, formal and informal writing including tests, homework, and projects; a portfolio of you being a scientist

School Supplies: Pen, pencils, colored pencils, ruler, scissors, paper, glue, computer diskettes, binder, lab notebook

Methods:

Lecture and guided discussions of new material (including note-taking)

Reading for content from text, Internet and other sources

Laboratory work involving observation, interpretation, reasoning, critical thinking and constructed responses

Observation and comparisons of various organisms

Cooperative learning in the lab, class, and field usually in groups of 2, 3, or 4

Journal: formal & informal observations and reflections on individual and cooperative work

Formal work: Lab reports, constructed responses, and Projects (5-7 pages with visual and oral presentations)

Assessment:

Homework, class work, journal/notebook entries, lab work, tests, quizzes, presentations, and papers are graded to provide feedback and a basis for assessment. The final exam is worth 20% of the final grade

Refer also to Class Policies for additional information about the expectations and standards in the Biology classroom.

Honors Biology Tentative Outline Fall 2006

(rev: 8-31-06)

Week	Dates	Topics	Reading Assignments	Lab/Activities	Comments, Video, Etc.
1-2	Aug 30- Sept 8	Introduction to Biology and the Characteristics of life	Chapter 1 (<i>Biology</i> by Solomon, Berg and Martin)	Fortune Fish Measurement Sow Bug Behavior	<i>Life Survival</i> <i>Life on Earth</i>
	Sept 6- Oct 27	Nature Journal	As Directed	10 Site Visits	50 species identified
3-5	Sept 11- 29	Ecology	Chapter 51-55		
		Communities and Biomes		Biome Posters	<i>Biomes</i>
		Population Biology		Lesson of the Kaibab	<i>Wolves of Yellowstone</i> Unit Test - Ecology
6	Oct 2-6	Chemical Basis of Life	Chapters 2 & 3		
7-10	Oct 9- 31	Cell Theory	Chapters 4, 5 & 7	Enzyme Reactions Detecting CO ₂	
		View of a Cell		Microscope observations	Scientific Drawings
		Cellular Activities		Osmosis Demonstrations	Biological Membranes
		Energy, Photosynthesis and Respiration	Chapter 6 & 8	Yeast Respiration	Unit Test - Cell Theory and Cell Activities
10-13	Nov 1- 22	Genetics, Heredity, and DNA	Chapter 9-16		
		Mendel and Meiosis		Probability of Inheritance	
		DNA, and Gene Technology		DNA Jewelry Berryful of DNA	<i>GATTACA</i>
		Heredity and Human Genetics		Size of the Genome Human Traits	Unit Test - Genetics Heredity and DNA
		Nature Journal	As Directed	10 Site Visits	50 species identified
14-16	Nov 27 - Dec 15	Theory of Evolution	Chapters 17-21		<i>Darwin's Dangerous Idea</i>

Week	Dates	Topics	Reading Assignments	Lab/Activities	Comments, Video, Etc.
		History of Life		Time Line Radiometric Dating	
		Darwin and Evolution		Natural selection Bird Beaks	
		Human Evolution			Unit Test - Evolution
		Diversity and classification	Chapter 22	Shark classification	<i>Life on Earth</i>
17	Dec 18- 21	Survey of the Kingdoms	Various Chapter Sections & handouts	Dissections - Optional	
18	Jan 2- 12	Animal Physiology	Chapter sections	Fish Breathing	
19	Jan 15- 19	Review and Final Exam	Review Notes	Performance Assessment	

This is a tentative schedule of topics. Please refer to the front board at least weekly if not daily to be aware of any modifications, additions or deletions.