
The ultimate goal of this class is that you learn how to:

DO THE SCIENCE OF BIOLOGY.

1. WE will develop a fundamental grasp of four of the major themes of biology: *Evolution*, *Genetics and Molecular Biology*, *Biodiversity*, and *Ecology and Conservation*.
2. WE will enrich our understanding of the impacts humans have on their environment.
3. WE will make connections between evolution, the common thread throughout all of biology, and the other three major themes of the year, genetics and molecular biology, biodiversity, and ecology and conservation.
4. WE will develop our scientific literacy so that we can make confident and informed decisions as a consumer, voter, and individual member of a species on this planet.
5. WE will prepare ourselves for additional science classes at Boulder High and beyond.

COURSE CONTENT (in brief):

First Semester

Unit I: How to Study Biology
Scientifically & Characteristics of
Life
Unit II: Biochemistry
Unit III: Ecology
Unit IV: Cellular Structure and Function
Unit V: Photosynthesis and Cellular
Respiration

Second Semester

Unit I: Genetics (*Mendelian Genetics, Meiosis, Protein Synthesis, Gene Regulation*)
Unit II: Evolution
Unit III: Comparative Anatomy
(*Alternatives to traditional dissection will be used for all Ms. Shaeffer's classes*)
Unit IV: Biodiversity

COURSE POLICIES:

Grading Practices: Student performance will be based upon the following breakdown.

Practice and Preparation (20%)

- Homework
- In-class work
- Laboratory Preparation
- Laboratory Participation

Formative/Summative (80%)

- Quizzes
- Exams
- Laboratory Reports
- Comprehensive Semester Finals (no more than 20% of the semester grade)

Late Work & Makeup Work:

Late, but completed assignments will be accepted up to the day of the unit assessment and will be marked late (which may lower the amount of credit). Students who have an excused absence from class must make up missed assignments (in-class assignments, quizzes, exams, etc.) as per Boulder High policy. It is the student's responsibility to complete class work even if they were absent. Our class website: www.bvsd.org/schools/boulder/faculty/shaeffer shows a detailed weekly calendar, lectures and handouts.

Reteach, Relearn, Reassess:

- Retakes will be offered at teacher's discretion
- Each student will have at least one opportunity for a unit exam retake each semester.
- The retake must be set-up in advance, with the teacher, within 2 weeks of original assessment.
- To qualify for a retake, students must show evidence of preparation.
- Only students with all work completed for that unit can qualify for a retake.

Attendance and Tardies:

Attendance and efficient use of class time will be essential for success in this class. Please be on time and do not miss class unless you must. All class work must be completed, even if you are absent.

Please make use of course website when absent: www.bvsvd.org/schools/boulder/faculty/shaeffer This website contains a detailed weekly calendar, lectures and handouts.

Class Conduct:

Students are expected to come to class prepared every day. This means having your biology notebook, pencil and pen, metric ruler, calculator and paper. Occasionally you will be required to bring your textbook to class. This will be announced a day in advance.

In Class Notes and Activities:

Written participation (or use of a personal laptop) is expected for all in-class activities. Lecture and reading notes should be taken neatly and carefully on ruled paper (loose-leaf is preferred, but a spiral notebook will also work.) Activity handouts should also be completed neatly and carefully. Some work will be graded mid-unit and handed back, but ALL unit work will be collected on unit exam day for credit.

It will help you greatly to stay organized throughout each unit, storing all work in your notebook in order of completion. This work will act as an archive of your learning which will help you study for the unit exams and final exams and be something you are proud of and can keep to give to your grandchildren. ☺

TEXTBOOK AND WEBSITE:

Miller, Kenneth R., and Joseph Levine. 2010. *Biology*. Pearson Education, Inc.

www.biology.com

Parent / Guardian Signature:

Please share this syllabus with your parent or guardian and ask them to sign below. As always, do not hesitate to contact me with questions. I look forward to a great rest of the school year.

Julie Shaeffer
(720) 561-2324
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Parent / Guardian Signature: _____ Date: _____