

Biology Syllabus 2018-2019

Instructor: McKenzi Fanning (mckenzi.fanning@tcsedu.net or 454-2620)

Textbook: ck12.org flexbook (plus biology textbooks in class for reference)

Instructions for Parents to Access Instructional Materials:

Here is a link to the ck12-based flexbook textbook that we will use:

<https://www.ck12.org/user%3Abwnrz56as5myw5uaw5nqhrjc2vkds5uzxq./book/Biology-1/>

Schoology will contain students' assignments and various resources, including links to resources like the textbook.

Major Assignments: You will have one or more projects/major assignments due each quarter, based on one or more of the standards covered that quarter. Information, links, and timelines for these will be posted on schoology. This includes rubrics that will detail project expectations and grading factors.

Classroom variety and the reasoning behind it:

This class utilizes many different methods of learning. These include class lecture (with feedback) and notetaking of various types, games, drawings and other hands-on activities, and projects. There are many reasons for this, but two main ones are these: 1. This variety has students activate different areas of the brain. The more areas of the brain we use, the more likely students are to remember and understand, and we are also more likely to hit on strengths for each student. 2. Students are more engaged when they do a variety of activities.

A main focus of this class is THINKING. Many students want to be spoon-fed but are not engaged enough for full understanding. Students need to figure things out and to enjoy learning.

Make-up work and work improvement:

The make-up work guidelines are stated in the student handbook. I often allow students to correct and/or improve assignments, if they have made a good effort in the first place and have completed the assignment in a timely manner. I allow students to improve work because the purpose of classes is learning, and sometimes students are still learning. That said, we do have a schedule to which we must try to stick, so improvements can't go on forever!

Homework:

Homework for my students will often be something like reading or studying or working on a project. They will rarely have classic homework, especially homework that takes a great deal of time. The deal I make with my students is that if they give me really good effort in class, homework will be almost unnecessary and will be kept to a bare minimum.

There is no way to know exactly what we will cover each day. Students may take longer with one topic or get through another topic quickly. If the understanding isn't there or if students are interested in going more in-depth in a topic, we will spend more time in it. Here is a general order for our topics this year:

Quarter 1:

*THINKING: science methods, learning to wonder, imagine, investigate, analyze

*CELLS: structure, function, growth, division, photosynthesis and respiration

Standards: 1.1, 1.2, 1.7,

Quarter 2:

*GENETICS: RNA, DNA, protein synthesis, human genome, biotechnology

Standards: 1.3-1.6, 3.1-3.3, 4.2

Quarter 3:

*INTERACTIONS: chemistry of life, ecosystems, populations, human impact, evolution

Standards: 1.8, 1.9, 2.1-2.5, 4.1, 4.3

Quarter 4:

*further investigation and review of all topics

ETSS Standards will be utilized throughout all quarters. These standards link what we are learning with contemporary topics.

Adapting:

My purpose as a teacher is not just to grow students' knowledge of biology. Students should grow as students and people. They should learn to advocate for themselves, work with others, work alone, be creative and hardworking. I hope that they are not afraid to try new things, to think outside the box and to try to keep searching for solutions. I hope that they become real learners.

The way class is done will most likely change throughout the year based on students interests and needs. This can include methods and specific topics based on our themes.