



BIOLOGY SYLLABUS

Bess Owens, 2012-2013

Text: Biology – The Dynamics of Life

Biology is the study (-ology) of life (Bio-). L'Chayim (li-KHAY-eem) is an ancient Yiddish/Hebrew term meaning literally, to life. It is used the way you would use "Cheers!" in English. **L'Chayim to the study of life: Biology! ☺**

Course Goals Biology will provide each student with:

- An understanding of the integral relationship of biology in our world.
- Hands-on experience using scientific to conduct experiments.
- Skill in collecting and analyzing data in order to solve problems.
- An understanding of the basic principles, theories of modern biology.
- An opportunity to develop reading, writing and communication skills.

Semester 1

Module 1

The Matter of Life

- *Characteristics of life
- *Resources needed for life
- *Cells, growth
- *Trapping and using energy
- *Responses to the environment
- *Biochemistry: macromolecules and enzymes
- *Properties of water, osmosis, diffusion
- *Carbon Units and Protein Structure

Semester 2

Traits and Fates

- *DNA structure, inheritance of traits, causes of change from gene to protein
- *Cell reproduction
- *Mendelian genetics
- *Evolution: natural selection, changes over time

What on Earth?

- *Classification
- *Factors which support life
- *Diversity and speciation
- *Human influence

Survey of Kingdoms

- *Protists, Fungi and plants
- *Invertebrate and vertebrate animals



Class Expectations

1. Follow directions the first time they are given.
2. Be IN your seat when the bell rings.
3. Take care of personal business outside of class time.
4. Contribute to a positive learning place for yourself & others.
5. Please make the teacher's job easy.
6. Have the supplies you need: Binder, Dividers, Paper, Pencils or Pens

Essential Elements of a Successful Class/Life

Respect – It is essential that teachers respect students, students respect teachers and students respect each other, even if they are very different than you.

Consideration – The Golden Rule – Do unto others as you would have them do to you. Don't leave a mess for some else to deal with. Leave your work areas the way you would like to have it left for your.

Caring - Caring for others is a vital part of a healthy work and learning relationships. Help each other out. Be kind one to another. Care about yourself. You deserve it.

Trust – Positive relationships are based on trust. If you lie you damage that relationship. YOU LOSE. It may take a long time to rebuild the trust they have in you.

Responsibility – Take ownership of your work. Clean up your messes. Take charge of getting your work done and turning it in. Don't blame others (cat ate it).

Integrity – Don't say others work is yours. Don't cheat, experience the pride of doing your own work and being able to be trusted. Your name on a paper means you did it.

Connection – Plug into you education. Focus on your work. Apply yourself. This is a big school so it is vital that you get connected to a few friends that will build you up and help you make good choices.

WASHINGTON STATE STANDARDS BASED ASSESSMENTS

Daily Work: Daily assignments are graded on a pass/fail bases. Pass = 1 point, Fail = 0 points in Skyward. **Students must complete the entire assignment to receive a passing grade.** They can have as much time as needed to complete the work, even if that takes several days. They may turn in completed late work up to the last 2 weeks of the semester. **No Work = No Credit! Put on your positive work attitude.**

Weekly Standard Based Assessments: Quizzes, Projects and Unit Test Retakes:

- 1. Quizzes and tests can be retaken again and again: as many times as desired.**
2. Weekly quizzes and tests can be made up any day before or after school.
3. All test retakes must be done before the last 2 weeks of the semester.
- 4. Learning activities are required before retesting.**
5. Students can only take a retest if ALL their daily assignments have been turned in.
6. The highest grade is posted in the grade book is the one that remains.

Extra Credit & Homework

There are **NO LARGE EXTRA CREDIT activities**. The best way to bring a grade up is by doing work and quizzes you missed. There will be 1 or 2 small extra credit activities to bring a quiz/test score up. Points cannot exceed the points possible on the quiz.

Homework: YOU ARE STRONGLY EXPECTED TO STUDY FOR QUIZES AND MAKE UP INCOMPLETE WORK. No work = no credit. There will be no homework on week-long breaks. I'm not working then, and neither should you. ☺ We will have progress reports for parents to sign.

Quality Bonuses

Quality Bonuses Are Great Because:

1. A student receives class recognition and respect for going above and beyond.
2. The teacher may mention quality bonuses to parents/teachers/administrators.
3. They can be given to parents to earn respect, recognition, or privileges/rewards.
4. They can be attached to Best Works and Presented in your Senior Presentation.
5. They can be used to make up one day's worth of daily assignments equaling 1 point.

Ways to Get a Quality Bonus

1. Develop reading, writing and communication skills needed to be a (science) teacher, by teaching part of the lesson or leading a group. EALRS: Reading 3.2, Writing 2.2 Communication 2.5
2. Receive recognition for extra time and effort to mastery of a science standard and/or reading, writing or communication EALR. EALRS: Communication 2.0, Writing 1.0, Reading 1.0
3. Increase communication with parents/teacher/student. EALRS: Communication 2.1 Writing 1.0
4. Going above and beyond to help another student master a science standard and/or help the teacher present a science standard. Communication 3.2, Communication 1.3

Essential Questions/Word of the Day



The Essential Questions/Word of the Day is a “fire starter” activity at the first 5 minutes of class to focus attention on a concept we are going to be addressing that day, or to review concepts and vocabulary. The questions are on the weekly quizzes.

SHOPPING LIST:

- A. **3-Ringed Binder**, or 1 ½” of a bigger one: Binder check on _____
- B. **Binder Dividers** (can made from cut file folders)
- C. **Pencils/pens, and lined paper.**
- D. **\$1.00 for a Science Lab Book**

Optional, but Needed: Hand sanitizer, Kleenex, treats like popcorn for non-lab days
Extra school supplies to share with needy students.

How to access the Glencoe Biology book online:

<http://www.glencoe.com/sec/science/biology/bio2002/index.html#>

Select Online Student Edition – Full version

User name: BDOL

Password (case sensitive): huChEtAsp5

Teacher Contact Information

Bess Owens, Auburn High School, 800 Fourth Street NE, Auburn, WA 98002,

(253) 931-4719 ex 1213, bowens@auburn.wednet.edu. **The very best way to get a hold of me is by e-mail.** Please note that I get many e-mails a day. During class time the students and teaching have my attention.

Learning Contract

I, _____, have read and understand the course expectations and procedures. **I AGREE TO ABIDE BY THEM. I WILL NOT LEAVE A MESS IN THIS ROOM. I will not disrupt the learning of others or myself. I take full responsibility for my behavior and learning in this class.**

Student's Signature

Date

I have reviewed the course expectations and procedures of this course and will support my student's success.

Parent's/Guardian's Name

Date

(_____) _____
Parents Phone

(_____) _____
Parent's Work Phone

Parent's E-mail address

Special Note for the Teacher's Eyes Only from _____

Auburn High School Science Department Safety Contract

I, _____ Period _____, agree to:
(**Print** student's first and last name.)

1. Follow all instructions explicitly. Get help fast.
2. Perform only authorized experiments.
3. No horse around during a lab.
4. Keep working area clean.
7. Report at once all accidents, broken glassware and unusual occurrences.
8. Be financially responsible for broken lab equipment and glassware.



I understand the need for safe attitudes and behavior in the science laboratory. Safe practices are for the protection of others and myself. **I agree to act within the limits of the stated safety expectations.**

Student's Signature: _____ Parent's Signature: _____