

Agriscience/Biology 1 Syllabus
Cumberland Gap High School
Rebecca Lay

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Telephone Number: 423-869-9964 ext. 213
Planning: 1:30-2:50

Introduction:

Welcome to my class! I am excited to spend this year exploring concepts related to life with you. Although this is only my third year at Cumberland Gap High School, I have spent the last 33 years teaching Biology. My goal is to make this class one of your favorites! The majority of the material will be new. Sometimes “new” concepts are often perceived as hard just because we are not familiar with them. For example, repeating the letters of the alphabet is an easy task for the majority of us. Imagine if you had never seen the alphabet and you were told to memorize them in a week. That task would be difficult because it would be “new”. Hopefully by the end of the year, you will know the new biology concepts as well as you do the ABC’s!

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Course Description:

The goal of this course is to develop an understanding of the relevance of biology as it relates to standards of living, career choices, and current issues in science and technology. This course offers an introduction to the basic concepts of Agriscience and Biology. Concepts discussed in the class include biochemistry, cell structure and function, genetics and heredity, cell processes, diversity of life, and how living things change over time. This course is designed to meet one of the science course requirements for college-bound students.

*All standards taught can be found at [Tennessee Academic Standards for Science](#).

Communication:

When needing to contact me you can reach out via Remind, email, or call the school. Remind is an app that students and parents can use to see class announcements, important dates, and ask questions. This is also the best form of communication for reaching me as it notifies me quickly. When reaching out with concerns, know that I will do my best to address your needs quickly and promptly within 24 to 48 hours. To add yourself, send a text to 81010:

- For 1st block, text this message: @c9478ef9f9

- For 2nd block, text this message: @2d6db3a3hk

- For 4th block, text this message: @26b2ka6g9b

Materials Needed:

- Single Subject Notebook
- Binder
- District given Chromebook and charger
- Paper
- Pencils/Pens
- Crayons or colored pencils
- Glue Stick
- Ruler

Classroom Policy/Procedures:

Mrs. Lay's Classroom Rules

- 1) ABOVE all else, treat the classroom, materials, peers, and teachers with **RESPECT**.
- 2) Be in your seat, ready to learn, when the bell rings. You must bring your binder and Chromebook to class each day!
- 3) Bottled water (or water in a resealable container) are allowed in the classroom (but never, not ever) in the lab.
- 4) You are expected to visit your locker and restrooms before coming to class. Restroom privileges will be limited (unless you provide me with a note documenting a valid medical excuse). A log of restroom passes will be kept. An intervention may be necessary for students that exceed "normal" frequency and duration of restroom breaks.
- 5) It is important that you follow all directions exactly, and that you listen to all instructions. Failure to follow directions may lead to suspension of laboratory privileges and other disciplinary measures. In order to hear instructions, you must be quiet while I am speaking. You will have plenty of opportunities to express your ideas in class, at the appropriate time and in the appropriate manner.
- 6) The school has a **NO CELLPHONE POLICY**. Cell phones must be placed in the designated holder at the beginning of class. Students will be assigned a number and be expected to put the devices away when entering the classroom. Failure to do so will result in the consequences explained in the student handbook. Once on school grounds these devices become school property and can be taken and held by school administration if seen fit. These devices must be **OFF** and in the hanger during class.

Honor Code:

Students are expected to do their own work. **Students who are caught cheating will receive a zero on the assignment and may be subjected to additional disciplinary action.** This applies to both the student copying work **AND** the student from whom they are copying.

Behavior Expectations

1. Be respectful to other students, staff and school property
2. Follow Directions at First Request.
3. Remain in the Assigned Area.
4. Use technology appropriately.
5. Keep Hands and Feet to Self.
6. Use Appropriate Language, Tone, and Volume.
7. Focus on classroom tasks and engage in learning.

Content:

<ol style="list-style-type: none">1. Module 1: Basics of Life<ol style="list-style-type: none">a. Characteristics of lifeb. Biochemistryc. Cell structure and function2. Module 2: Cellular Processes<ol style="list-style-type: none">a. Plasma Membrane and Cell Transportb. Photosynthesisc. Cellular Respiration3. Module 3: The Central Dogma<ol style="list-style-type: none">a. The Cell Cycleb. DNA Structure and Functionc. DNA Replication, Transcription, and Translation (Protein Synthesis)	<ol style="list-style-type: none">4. Module 4: Heredity<ol style="list-style-type: none">a. Meiosisb. Asexual and Sexual Reproductionc. Mutations and Diseasesd. Karyotypese. Punnett Squaresf. Inheritance Patternsg. Pedigreesh. Biotechnology5. Module 5: Biodiversity<ol style="list-style-type: none">a. Biological Evolutionb. Natural Selection and Evolution of Populations6. Module 6: Ecology<ol style="list-style-type: none">a. Population Sizeb. Cycles of Matter and Energy Transfer in Ecosystemsc. Food Websd. Ecological Pyramidse. Successionf. Biodiversity and Humans
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Resources

*Miller, K. & Levine, J. (2019). *Biology*. Pearson Education, Inc. (Bee Book)

Other resources may be added as supplemental material at any time.

Statement concerning the option of alternatives for material deemed objectionable by parent/student.

*If you do not approve of a specific resource listed in this syllabus, please make your request to me in writing and an alternative assignment and/or materials will be provided. The request should include your name, the child's name, the specific activity/materials in which you do not want your child to participate or to which you do not want them exposed, and the nature of your objection. Please remember that the topics stated above are chosen by the state and your child will be tested on them in the End of Course assessment whether they complete the material or not.

*Possible resources to enhance content might include:

- Discovery Education
- National Geographic
- Quizizz
- Gimkit
- Biology Corner
- SAVVAS reader
- University of Colorado
- pHet simulations
- YouTube Video Clips
- Amoeba sisters
- Blooket
- Quizlet
- Kahoot

Safety Procedures

Claiborne County Safety Contract – required for ALL lab activities. Lab safety contracts **MUST BE SIGNED** and returned by students and parents/guardians before a student will be admitted to the lab.

Assessments and Assignments

*Assessments will be based on the curriculum standards (Tennessee Science Standards). These standards will be provided to students at the beginning of each unit and for each lesson, so the information and procedures for which students will be tested will have been provided prior to covering a lesson.

*Exams will correlate to module topics

*Weekly (or almost weekly) quizzes on the lesson for **each key topic** will be based on the standards outlined in the curriculum.

*Daily work will include Daily Bell Ringers, CK-12s, Class Discussions, Notes, Lesson Activities, Labs, Online Activities, Presentations, Models, and Group Projects. We will work on many of our daily assignments for several days before turning them in. **Each of these projects, models, and activities will be stored in their binders for reference when reviewing for EOCs.**

Grading Policy/Rubrics

*Classroom Grade Percentages

Homework/Daily Assignments 40%

Quizzes 15%

Unit Tests 45%

EOC is added at the end of the semester as 15% of the entire course grade

**Your grade will be posted in Aspen.

**Missing assignments, excused or unexcused, will be entered into the gradebook as a “0”. After the assignment is completed, the “0” will be replaced with the actual grade.

Claiborne County Grading Scale

A - 100 – 90, B - 89-80, C -79-70, D - 69-60, & F - less than 60

Homework Policy

* Homework is due the day after it is assigned (unless otherwise indicated). Homework not available for grading at the beginning of the class period, unless due to absence the previous day, will receive a **zero grade** with no make-up work accepted for a grade. Homework assignments are designed to help practice the new material that has been covered and as an assessment of student understanding of the new material. Completing an assignment after the due date is ineffective as a learning tool.

Make-Up Work Policy/Late Work Policy for Absences

*Students are expected (and encouraged) to be in class every day. Biology is a course that builds on previously-covered material, so missing even one day can make learning subsequent materials more difficult. In the best interest of the student, missed homework, quizzes, and tests should be made up the day after the student returns to school. If the student has missed several days, an individualized plan will be created.

Extra Credit

*Students will be provided with opportunities to revise assignments or complete alternate assignments to replace unsatisfactory grades.

Portal Post Policy

* My goal is to have tests and quizzes graded and returned within 72 hours after the assessment. All grades will be updated in Aspen once every week to two weeks.

PLAGIARISM

According to Harbrace Handbook, 15th edition:

Plagiarism is defined as “presenting someone else’s ideas, research, or opinion as your own without proper documentation, even if it has been rephrased.”

It includes, but is not limited to the following:

1. Copying verbatim all or part of another’s written work;
2. Using phrases, figures, or illustrations without citing the source;
3. Paraphrasing ideas, conclusions, or research without citing the source;
4. Using all or part of a literary plot, poem, or film without attributing the work to its creator.

CONSEQUENCES OF PLAGIARISM

Plagiarism is a form of stealing and academic fraud. Students who are found guilty of plagiarism will have the option of either redoing the assignment within a specified time period and accepting a grade letter drop or taking a zero on the assignment. Parents should be involved in making the decision.

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The class syllabus is posted on Google Classroom. After you have read through the syllabus, please sign and return this page.

Thank you!

SYLLABUS AGREEMENT

I agree to all policies outlined in this syllabus. ***This page needs to be signed and returned.***

Student Signature: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____

*** The syllabus is subject to change***