Subject Schedule

AP BIOLOGY

Subjects below will be covered in your AP Biology class. Subjects have been chosen to best help students pass the AP Biology Exam (May 5, 2025).

SEMESTER ONE

Unit 1 - Chemistry of Life

- Structure of Water & Hydrogen Bonds
- Elements of Life
- Properties of Biological Molecules
- Structure & Function of Biological Molecules

Unit 2 - Cell Structure & Function

- Size of Cells
- · Parts of the Cell
- Membrane Structure & Function
- Membrane Transport

Unit 3 - Cellular Energetics

- Energy Transfer
- Enzymatic Reactions
- Catabolic & Anabolic Reactions
- Cellular Respiration & Photosynthesis
- Life Dependency on Energy Transfer

Unit 4 - Cell Communication and Cell Cycle

- Cell Signaling
- Receptor Proteins
- Signal Regulation
- Apoptosis
- Cell Cycle & Regulation of the Cell Cycle



SEMESTER TWO

Unit 5 - Heredity

- Meiosis
- Genetic Variation & Evolution

- Mendel & Inheritance Patterns
- Epigenetics

Unit 6 - Gene Expression and Regulation

- DNA/RNA Structure
- Replication
- Protein Synthesis
- Gene Regulation
- Gene Expression
- Mutations & Natural Selection
- Biotechnology

Unit 7 - Natural Selection

- Types of Selection
- Population Genetics
- Evidence for Evolution
- Phylogeny
- Speciation & Extinction
- · Origins of Life

Unit 8 - Ecology

- Responses to the Environments
- Energy Flow
- Population Ecology
- Community Ecology
- Biodiversity
- Disruptions of Ecosystems





AP BIOLOGY SYLLABUS

Procedures & Expectations

CONTACT INFORMATION

Name: Mrs. Perry Email: perryb@luhsd.net



CLASS ROUTINE

- 1. Read the board for agenda of the day & instructions
- 2. Check to make sure you have all needed supplies (this is the time to get supplies)
- 3. Turn in assignments if needed
- 4. Pick up for handouts (especially if you were absent)

- Pencil(s)
- Notebook
- Colored Pencils
- Highlighter
- Calculator



CLASS INFO

Learning Platform: Canvas



All course information will be posted by unit in Modules on Canvas. Students are expected to use Canvas to access notes, assignments, virtual labs, and homework assignments.

GRADING CATEGORIES

Grading is weighted by category.

- Summative work is 80%
 - Labs
 - Quizzes
 - Tests
- Formative work is 20%
 - Classwork
 - Homework
 - Group Work

GRADING SCALE

A traditional grading scale is used.

100-97 = A+96.9 - 93 = A

92.9 - 90 = A -

89.9 - 87 = B +

86.9 - 83 = B

82.9 - 80 = B -

79.9-77 = C+ 69.9-67 = D+ 76.9 - 73 = C66.9 - 63 = D 72.9 - 70 = C -

62.9 - 60 = D -

59.9 - 0 = F

PERSONAL ITEMS

Please do NOT use the following items during instructional time:

- Personal electronics (cell phones, headphones, etc.)
- Food
- Drinks (water is ok)



ABSENCES



Check Canvas

etc.)

- Turn in assignments on Canvas if possible so they aren't marked late
- Complete notes and assignments for the day you missed - write ABSENT on your work so it doesn't get a late penalty
- 1 week is given to finish absent work

Planned Absence (Vacations)

- Inform Mrs. Perry
- Check Canvas while you are absent or immediately upon returning

• Complete all work and turn in ASAP.



AP BIOLOGY SYLLABUS



Biology requires group work. Either in a lab, a project or class challenge. Be prepared to participate to the best of your ability.

LATE WORK

- Late work may be accepted for 1/2 credit UP TO the day of the unit exam.
- It is your responsibility to turn work in on time.



ASSESSMENTS

Assessments count for a large majority of your grade. Each unit will conclude with an exam consisting of

- 25 MCQ (25 points)
- 2 FRQs (25 points)

There are NO retakes in AP Biology.



- Sign up to do corrections during Pat Plus (sign up at least 24 hr in advance to allow time for me to print and organize your materials).
- Test corrections must be done within 2-3 weeks of the exam.

FOOD & DRINK

For your safety and the safety of others, food and drink are not allowed unless otherwise discussed with Mrs. Perry

NOTEBOOKS

At the start of each unit, students will receive a TOC page (Table of Contents) and a handout with the unit Learning Targets.

Students will use the TOC page keep a log of all notes, handouts, classwork, and homework.

- Formative work (classwork and homework) will be stamped on the TOC page.
- Notebooks will be checked on the day of each Unit Exam.
- Late work without stamps will earn <u>1/2</u> credit
- No Notebook or TOC = 0 on formative work for that Unit (even if you got stamps when the work was originally done)

LAB QUIZZES

Labs will usually have a lab quiz follow-up. You ARE allowed to use your lab & notes. You ARE NOT allowed to use your lab members!

AP BIO EXAM

The HHS pass rate for the AP Biology Exam is consistently between 80-85% (84% last year). The state and national pass rates are usually around 65%.

I expect all students to register for the AP Biology Exam. The AP Exam is the best way to test your knowledge and critical thinking skills. It's also a great way to earn college credits in Biology (many colleges give credit for passing the exam with a 3, 4 or 5). If planning to major in Biology, most colleges will give you elective credits for passing the AP Bio Exam.

Science is all about effort! Put in the effort, ask for help, and don't give up! You'll be able to learn great things and together enjoy the year!