

Teacher: Mrs. Colquitt
E-mail Address: LCOLQUITT@acpsd.net
Office Hours: W.I.N. (PowerHour) 2nd half

Text and other required materials

TEXT: *Campbell Biology in Focus* by Urry, et al. (Second Edition)

You are required to enroll in “AP BIO 2023-24”. Visit <https://myap.collegeboard.org> and enter the section join code _____

You are required to join *Remind*.

REQUIRED MATERIALS:

2-inch three-ring binder

eight inquiry-based investigations (two per big idea throughout the course). Additional labs will be conducted to deepen students' conceptual understanding and to reinforce the application of science practices within a hands-on, discovery-based environment. All levels of inquiry and all six science practice skills will be used by students on a regular basis in formal labs as well as activities outside of the lab experience. The course will provide opportunities for students to develop, record, and communicate the results of their laboratory investigations.

Science Practices (SP)

1. The student can explain biological concepts, processes, and models presented in written format.
2. The student can analyze visual representations of biological concepts and processes.
3. The student can determine scientific questions and methods.
4. The student can represent and describe data.
5. The student can perform statistical tests and mathematical calculations to analyze and interpret data.
6. The student can develop and justify scientific arguments using evidence.

Attendance/Make-Up Work Policy:

Participation in class lecture, labs, demonstrations, and other activities is essential to success in any science class. Complete the assignments on time. See make-up/late work policy in the Student Handbook for Student Absences. Students are expected to turn in any previously assigned work or take any previously assigned tests or quizzes upon their return to school. A maximum of 50% will be awarded if work is turned in later than one day after the assignment's due date. Obtain any missed notes from a classmate and check our Schoology page for posted assignments and documents. Written assignments will be substituted for missed laboratory activities. It is the student's responsibility to arrange for completion of make-up work during WIN/Power Hour.

Academic Schedule

Introduction to Course and Statistics

- A. Biological Themes

- A. Meiosis
- B. Meiosis and Genetic Diversity
- C. Mendelian Genetics

- D. Non-Mendelian Genetics
- E. Environmental Effects on Phenotype
- F. Chromosomal Inheritance

Unit VI: Gene Expression and Regulation

- DNA and RNA Structure
- Replication
- Transcription and RNA Processing
- Translation

- Regulation of Gene Expression
- Gene Expression and Cell Specialization
- Mutations
- Biotechnology (Lab with GGC@SAHS)

Unit VII: Natural Selection

- Introduction to Natural Selection
- Natural Selection
- Artificial Selection
- Population Genetics
- Hardy-Weinberg Equilibrium
- Evidence of Evolution
- Common Ancestry

- Continuing Evolution
- Phylogeny
- Speciation
- Extinction
- Variations in Populations
- Origin of Life on Earth

Unit VIII: Ecology

- A. Responses to the Environment
- B. Energy Flow Through Ecosystems
- C. Population Ecology
- D. Effect of Density of Populations

- E. Community Ecology
- F. Biodiversity
- G. Disruptions to Ecosystems

Cheating

All of the following are considered cheating and are not allowed in our class:

- Copying someone else's work
- Allowing someone else to copy any of your work (if you provide answers you are just as guilty as the one copying.)
- Plagiarizing (including the Internet) for projects, etc.
- PARAPHRASE; do not copy word for word
- Discussing information on tests or quizzes with any other class member

Per the Student Code of Conduct, students caught cheating will receive a zero on the assignment in question for the first infraction. For a second infraction, students will receive a zero in the assignment as well as in school suspension. For a third infraction, students receive a zero in addition to out of school suspension.

Lab Safety

Both parents and students must sign the Flinn Scientific laboratory safety contract and return it prior to the first laboratory activity. This safety contract must be returned to the teacher signed by both student and parent in order for the student to participate in lab. Proper dress is also required for each lab, which includes closed-toe shoes.

Evaluation

Summative assessments will account for 60% of your grade each quarter. The remaining 40% will come from formative assessments. Final exam counts for 20% of the semester grade.

Examinations

Your final exam will be a project. It will count the standard 20% of your S2 grade.

AP Biology Syllabus Signature Page

Student Name (Please print): _____

Student Signature: _____

Guardian/Parent, Please complete the following:

Guardian Name (Print) _____

Guardian Signature: _____

Guardian Email: _____

Guardian Primary Phone Number(s): _____

Preferred Method of Contact: _____

Mrs. Colquitt

AP Biology

Homework Checklist for tonight

Sign up for *Remind* (code found in syllabus)

Syllabus Signature Page, signature student and guardian

Formative Grade, collected tomorrow

Lab Safety Contract, signature student and guardian

Formative Grade, collected tomorrow

Supplies (needed materials found in syllabus)

teacher check next week, on Monday