

AP BIOLOGY

Teacher: Margaret Michaud
Google Classroom: 2cz6n6
Tutoring Hours: Wed. 3:30PM to 4:30PM

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Course Description: Advanced Placement Biology is equivalent to a **two-semester** college biology course. The course is structured around the enduring understandings within four big ideas in biology:

Big idea 1: The process of evolution drives the diversity and unity of life.

Big idea 2: Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.

Big idea 3: Living systems store, retrieve, transmit, and respond to information essential to life processes.

Big idea 4: Biological systems interact, and these systems and their interactions possess complex properties.

Advanced placement Biology will provide a basis for students to develop a deep conceptual understanding as well as opportunities to integrate biological knowledge and science practices through inquiry-based activities and laboratory investigations. After the successful completion of this course, with a qualifying score on the AP exam, students may receive college credit from a college of choice. (Note: Not all colleges accept the same exam scores, please check with your future college choices to ensure credit)

Required Materials:

- Campbell /Reece *Biology Sixth Edition*--issued by teacher
- Composition notebook--quad ruled or graph

Grades: All Unexcused Late Work Will Receive a Fifty Point Deduction

Tests-40%

Tests are composed of AP-style exam questions as well as AP style essays. Exam questions will be based on class notes, labs and the Campbell text. **Textbook Reading: Very Important!** Read the book nightly and stay up to date to be prepared.

There will be quizzes on assigned reading.

Labs/projects-30%

The AP Biology course includes a strong laboratory component. Students are given the opportunity to engage in student-directed laboratory investigations throughout the course for a minimum of 25% of instructional time. Students will conduct a minimum of 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 will be used, and all seven 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)

- The student can use representations and models to communicate scientific phenomena and solve scientific problems.
- The student can use mathematics appropriately.
- The student can engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course.
- The student can plan and implement data collection strategies appropriate to a scientific question.
- The student can perform data analysis and evaluation of evidence.
- The student can work with scientific explanations and theories.
- The student can connect and relate knowledge across various scales, concepts and representations in and across domains.

Homework/Classwork-15%

- Free response questions- due periodically
- Objectives- due at the end of each chapter
- Vocabulary notebook- due at the end of each chapter

Quiz-15%

- Chapter quizzes- on assigned reading
- Vocabulary quizzes- approx. two per month
- Article reviews/Abstracts
- Activities- various formats/assessments
- **ALL extra credit will go into this category**

A = 90-100 B = 80-89 C = 70- 79 D = 60-69 F = 59 and below

Classroom Rules:

- No phone calls, texting, gaming or unrelated video watching are allowed during class.
- All policies set forth in the Terry Sanford Student Handbook must be adhered to.
- Safety is a primary concern and all students must comply with the Laboratory Safety Contract.

