AP Biology Course Syllabus 2025 -2026
AP Biology & IB Biology Year 1
AP Biology Exam Date: May 4th
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Join Remind: Text @westhubap to 81010

COURSE DESCRIPTION

AP Biology is a year-long course that is designed to prepare students for the Advanced Placement Exam in Biology. Advanced Placement Biology is designed to be the equivalent of a two-semester college biology lab course in its quality and sophistication. The course is designed around the AP Biology curriculum framework. The curriculum provides a basis for students to develop strong conceptual understanding in biology and the opportunity to integrate that knowledge through inquiry-based activities and laboratory investigations that incorporate multiple science skills and practices. Primary emphasis will be on developing an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts, personal experience in scientific inquiry, recognition of unifying themes that integrate the major topics of biology, and application of biological knowledge and critical thinking to environmental and social concerns.

Laboratory Component

The lab component incorporates approximately 25% of the instructional time. The majority of the laboratory investigations are inquiry based at various levels. They range from guided inquiry to open inquiry investigations. There are some basic statistical tools that are essential in the analysis of biological experiments. The curriculum includes that students are familiar with Chi-square, standard deviation, standard error and the T-test. In addition, the students need to understand the importance of identifying mathematic trends. This includes generating a line of best fit for certain data. Student presentation of the laboratory investigation includes mini-posters, peer review, and laboratory reports. The laboratory investigations are designed to incorporate science practices with different investigations. These Science Practices can be found on The AP Biology College Board Site. IB students will use the inquiry labs to begin preparing for their Internal Assessment.

Teaching Strategies

This course incorporates a variety of teaching strategies. These may include direct instruction and video lectures, class discussions, inquiry-based thinking, reading and summarizing, quizzes, labs, activities, and project-based learning.

Student Evaluations and Assessment:

Academic Honesty: We take academic honesty very seriously in the IB Programme at ARC. We will adhere to ARC's IB Academic Honesty policy which can be found on the ARC IB website. The policy includes Level 1 (accidental or passive malpractice) and Level 2 (intentional or active malpractice) offenses. Level 1 offenses can often be corrected in class by a student/teacher conversation. Repeated Level 1 offenses will lead to a Level 2 offense. Level 2 offenses result in a meeting of all teachers, parents, student, IB Coordinator, and IB Head of School and result in 90 days of academic probation. A second offense results in a meeting with all teachers, parents, student, IB Coordinator, IB Head of School and principal and can result in dismissal from the IB Programme.

Assessment & Grading: We will adhere to the ARC Assessment Policy. Please see the attached page for the late work and AI policies and expectations. Please sign and return the first week of school.

Course Grading Procedures: We will follow the Richmond County Grading Policy for the calculation of semester grades:

Minor Grades: 60% Major Grades: 40% Final Exam: 10%

Major summative assessments are given at the end of each unit of study during the grading period. These assessments consist of multiple-choice questions, math problems, long free response, and short free response questions that are a reflection of what will be on the AP exam (in content, volume, and pacing). The unit exams will take one to two class periods to administer. Students are also given minor assessments in the form of laboratory assessments, quizzes, and math-set problems.

Reassessment: Students will be allowed the opportunity of reassessment for major assessments. Any student who wishes to reassess a major assessment will need to complete the reassessment plan expectations provided when the student is given feedback from the original assessment. All reassessment expectations must be met before sitting for reassessment.

EOC Milestones Exam: Any students who have not taken a biology course previously in high school will also be required to take the EOC Milestones Exam in May. This exam will count as the 10% 2nd semester exam grade for the course and is required for graduation.

About the AP Program

AP enables students to pursue college-level studies while still in high school. Through more than 30 courses, each culminating in a rigorous exam, AP provides willing and academically prepared students with the opportunity to earn college credit, advanced placement, or both. Taking AP courses also demonstrates to college admission officers that students have sought out the most rigorous course work available to them. Each AP course is modeled upon a comparable college course, and college and university faculty play a vital role in ensuring that AP courses align with college-level standards. Talented and dedicated AP teachers help AP students in classrooms around the world develop and apply the content knowledge and skills they will need in college. Each AP course concludes with a college-level assessment developed and scored by college and university faculty as well as experienced AP teachers.

AP Exams are an essential part of the AP experience, enabling students to demonstrate their mastery of college-level course work. More than 90 percent of four-year colleges and universities in the United States grant students credit, placement, or both on the basis of successful AP Exam scores. Universities in more than 60 countries recognize AP Exam scores in the admission process and/or award credit and placement for qualifying scores. Visit https://apstudent.collegeboard.org/creditandplacement/how-to-earn-credit-for-your-scores to view AP credit and placement policies at more than 1,000 colleges and universities. Performing well on an AP Exam means more than just the successful completion of a course; it is a pathway to success in college. Research consistently shows that students who score a 3 or higher on AP Exams typically experience greater academic success in college and are more likely to graduate on time than otherwise comparable non-AP peers. Additional AP studies are available at www.collegeboard.org/apresearchsummaries.

About the AP Biology Exam

The AP Biology Exam consists of two sections: multiple choice and free response. Both sections include questions that assess students' understanding of the big ideas, enduring understandings, and essential knowledge and the ways in which this understanding can be applied through the science practices. These may include questions on the following:

- The use of modeling to explain biological principles;
- The use of mathematical processes to explain concepts;
- The making of predictions and the justification of phenomena;
- The implementation of experimental design; and
- The manipulation and interpretation of data.

The exam is 3 hours long and includes both a 90-minute multiple-choice section and a 90-minute free-response section. The multiple-choice section accounts for half of the student's exam grade, and the free-response section accounts for the other half. Due to the increased emphasis on quantitative skills and application of mathematical methods in the questions

on both sections, students will be allowed to use simple four-function calculators (with square root) on the entire exam. Students will also be supplied with a formula list as part of their testing materials.

COURSE SUPPLIES

- Binder of your choice
- Paper
- Pencils/Pens/Highlighters
- Calculator with basic scientific functions
- Index Cards
- Student Laptop

CLASSROOM EXPECTATIONS:

Classroom Rules and Consequences

- Be respectful! Show respect to everyone and everything.
- Be prepared! Bring your daily-required materials and assignments to class every day.
- Be productive! Stay on task and complete the day's work.
- All other school rules and policies are in effect. (See RCBOE Code of Conduct.)

Lab Safety Contracts:

Please read, sign, and return the lab safety contracts during the first week of school. The lab safety quiz must be passed in order to work in the lab.

Technology: We will follow/enforce the Richmond County Digital Device Policy.

ATTENDANCE EXPECTATIONS

Make up work is essential to your success…it is also the student's responsibility to obtain make up work and schedule make up tests. Email your teacher when you are absent…we can start planning your make up work when you are home. If you are severely ill, this will be taken into consideration when creating a make-up work schedule. Communication is crucial. When you are out please follow this procedure

1. **Email or message teacher when you know you are going to be absent**. This serves as a reminder for me to set aside handouts, notes etc. that you may need.
2. **Discuss** what was covered during your class period with a **reliable** classmate.
3. **Obtain** necessary materials from a classmate or teacher.
4. **Schedule** make up tests when you return to school.
5. If you return to school on the date of an announced assessment, be prepared to take it. You can always reassess if necessary but this will ensure you keep moving forward in the content!

Tutoring: Tutoring will be available after school by appointment on before and after school from 7:45 – 8:10 am and 3:30 – 3:50 pm. Please check Canvas announcements and the tutoring schedule posted in the classroom each week.

Providing Information:

Please go to the following link and provide the requested information: http://bit.ly/2v6ApNe

AP Biology Course Outline (subject to change at the instructor's discretion)

We will follow the course scope and sequence of the AP Biology CED found here:

https://apcentral.collegeboard.org/pdf/ap-biology-course-and-exam-description-0.pdf?course=ap-biology

General Overview:
Unit 0: Lab Safety, Scientific Method, & Data Analysis & Graphing
Unit 1: Chemistry of Life (8 – 11%)
Unit 2: Cell Structure & Function (10-13%)
Unit 3: Cellular Energetics (12 – 16%)
Unit 4: Cell Communication and Cell Cycle (10 – 15%)
Unit 5: Heredity (8 -11%)
Unit 6: Gene Expression & Regulation (12 – 16%)
Unit 7: Natural Selection (13 – 20%)
Unit 8: Ecology (10 – 15%)

Each Unit will include reading assignments, inquiry activities, laboratory performance assessments, formative assessment checks and a summative assessment. Progress checks will also be administered through AP Classroom on the College Board Site to provide formative assessment feedback after each unit. This data will help students track their mastery of content moving towards the AP Exam.

All students will be expected to take the AP Biology Exam. The exam is May 4th. A practice exam will be administered in the Spring to help students create a study plan to be ready for the AP Exam. AP Classroom will be used throughout the year to provide extra support and practice with AP Questions. Students can login to AP Classroom and practice and review at any time.

Textbook Information: This year we will use Campbell's Biology in Focus, AP Edition, 4e for the AP Biology Curriculum. We will also supplement with Openstax AP Biology and Kognity IB Biology throughout the course, depending on your Biology track (AP or AP/IB).

I look forward to working with you this year!

Ms. West-Hubbard

Late Work & AI Policy

Target Behavior: Students are expected to submit work on time. Doing so exhibits pride in producing quality work and fulfilling student responsibility. This work habit is a behavior that supports academic achievement and demonstrates characteristics from our Richmond County School System Profile of a Graduate. Late work can negatively impact learning and your ability to demonstrate mastery of the standards. *See RCBOE IHA-R Grading Practices*

Target Behavior: When the assignment calls for students to produce original work, students will not use Artificial Intelligence (AI) to generate the assignment for them. Assignments are given to help students learn and demonstrate what they know. While there may be appropriate times for students to use AI during the learning process, using AI to generate original work in place of the student completing the work, is considered Academic Dishonesty and can be punished according to the rules outlined in the Code of Conduct.

Student Contract: I understand that all work should be completed on time. I understand that my teacher may deduct five points per day and communicate this in my Infinite Campus gradebook. I also understand that work turned in after the learning has occurred may not be graded (no more than 5 school days from the due date). I understand that using Artificial Intelligence to complete assignments where I am asked to produce original work will be considered Academic Dishonesty.

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Student Signature Date

Parent Contract: I understand that my child is expected to complete assignments on time. I will remain in communication with my child's teacher and monitor missing and late work as noted in Infinite Campus Parent Portal. If my child continues to submit work late, I understand that a parent-teacher conference will be needed to co-develop a plan of action. I understand that my child should not use Artificial Intelligence to complete assignments where students are asked to produce original work.

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Parent Signature Date