FORSYTH COUNTY COURSE SYLLABUS 2020 – 2021

COURSE TITLE: AP Biology - Lambert High School

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Course Description: AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions. Students are expected to take the AP Biology exam in May. This course conforms to College Board topics for the Advanced Placement Biology Examination. This course requires a rigorous college level lab component and utilizes a college text. The prerequisites for this course as indicated by the College Board are successful completion of Biology and Chemistry. This course aligns with the new curriculum created by the College Board in 2019. The new course reduces content coverage in order to make room for deeper exploration of core topics and the practice of scientific skills.

Standards: An overview of the course may be found here https://apcentral.collegeboard.org/pdf/ap-biology-course-a-glance.pdf?course=ap-biology and a more in-depth discussion of the course may be found here https://apcentral.collegeboard.org/pdf/ap-biology-course-and-exam-description-0.pdf?course=ap-biology

Resources:

1) Students need to bring a computer (PC, Mac, or Chromebook all fine) each class day (or use a school Chromebook). We will use these devices for notetaking, group discussions and course assessments. Students who wish to have paper copies of notes and worksheets can print on their own or ask the teacher in advance. Instructions for accessing the digital tools listed below are all available as screencasts on one page in the ItsLearning course.

Resource name (all free)	What we will use it for	
OneNote	Digital notebook – videos, textbook selections, worksheets	
Moodle	Graded assessments and practice quizzes	
AP Classroom	Practice assessments written by the CollegeBoard	
Safe Exam Browser	Locks down a device while you take an assessment	

- 2) Students will also need a calculator the CollegeBoard permits four-function, scientific, or graphing calculators (see https://apcentral.collegeboard.org/ap-coordinators/on-exam-day/calculator-policy?course=ap-biology). Use the calculator you use for math class.
- 3) Optional To reduce the possible spread COVID-19 by lab safety goggles, every lab will be equipped with a spray bottle of 70% isopropyl alcohol solution to sterilize goggles between each use. Students are welcome to bring their own goggles provided the goggles meet safety standards. They must be splash proof and have a Z87+ impact rating. The linked goggles should meet the safety guidelines required at most colleges as well. Safety glasses are not acceptable protection. Suitable goggles are linked below. An electronic copy of the syllabus can be accessed on Itslearning so that you can follow the links.

Flinnsci.com <u>AP3306</u> or <u>AP3309 for Fog Free.</u> Amazon.com - <u>Green Safety Goggles</u>

4) Requested, but not required - To support student learning, your instructor would like to use Labster.com to provide a safe laboratory experience. Labster.com will provide an online platform for students to simulate a laboratory experience. This is a requested lab fee of \$8 to cover the fee for registration with the website. Please speak to your individual instructor if you have guestions or concerns.

Teacher Expectations for Students: As this is a college-level class, students are expected to plan ahead and utilize time wisely. It is easy to fall behind, especially if you are taking multiple AP courses. The general workflow is start learning key material by previewing videos and readings on OneNote (taking notes), then adding to those notes and asking questions when we review the material together. Finally, review

Student Expectations for Teacher: I will serve as your guide through this class by facilitating your learning of the vast curriculum. Additional resources include my unit study guides, YouTube videos, and practice assessments through Moodle and AP classroom. If you want extra support, I am happy to work with students before or after school as

needed. Arrangements can be made in advance for students to get extra time or help as needed. I want you to succeed in this course and I want you to also be prepared for success continuing your study at the college level.

Textbook: *Biology in Focus* 2nd edition, Lisa A. Urry *et al.* 2016 Pearson ISBN: 0-321-96275-3. The county expects you to access and read the text online – students will be instructed on how to access the platform in class. You might wait to purchase a copy until you try the OneNote resources.

Learning Resources/Textbook(s): All learning resources, both print and digital, are meant to support and enhance the student learning experience of this class. Below are the names of the textbooks and websites that will be used in this course. Some of the web-based resources require parent permission per federal regulations. Federal laws that guide parent permission requirements are as follows:

- Children's Internet Protection Act (CIPA): The school is required by CIPA to have technology measures and
 policies in place that protect students from harmful materials including those that are obscene and pornographic.
 Any harmful content contained within inappropriate sites will be blocked.
 http://fcc.gov/cgb/consumerfacts/cipa.html
- Children's Online Privacy Protection Act (COPPA): COPPA applies to commercial companies and limits their
 ability to collect personal information from children under 13years of age. No personal student information is
 collected for commercial purposes. https://www.ftc.gov/tips-advice/business-center/guidance/complying-coppa-frequently-asked-questions-0
- Family Educational Rights and Privacy Act (FERPA): FERPA protects the privacy of student education records and gives parents the right to review records. Under FERPA, schools may disclose directory information in certain circumstances.

http://www2.ed.gov/policy/gen/guid/fpco/ferpa

Below is a full list of biology resources provided by the county. At Lambert, we will use the textbook above and selections provided in the OneNote notebooks. Each website related to the curriculum resources is provided along with their privacy policies. Should you have any questions regarding these resources immediately contact the course teacher via email or phone.

Name of Resource*	Digital	Privacy Policy
Biology - McDougal Littell	http://www.classzone.com/cz/books/bio_07/	ClassZone
(2008)	book_home.htm?state=GA	
Campbell Biology 12th	AP Biology Pearson Mastering Biology	SAAVAS
Edition	etext	
OpenStax	Concepts of Biology (Honors)	Terms of Service
	AP Biology	
Georgia Virtual School	Biology	http://www.gavirtuallearning.org/te
	AP Biology	rms.aspx
Discovery Education	Classlink Access	Discovery Media Terms of Use
NewsELA Biology	Classlink Access CLEVER	NewsELA Privacy Policy
CK-12 FlexBook:	Classlink Access CLEVER	CK-12 Terms of Use
Biology	AP Biology	

^{*} The following resources are county approved. These resources may vary by school due to sequencing, pacing, curriculum design, and/or individual needs of students.

Academic Integrity:

Academic integrity is the pursuit of scholarly activity in an honest and responsible manner. In the classroom, academic integrity involves a range of issues, including – but not limited to – cheating, plagiarism, and facilitating acts of academic dishonesty by others. Violations of academic integrity as outlined in the Forsyth County Schools Code of Conduct will be addressed according to the guidelines listed there.

Grading Policy: Grading Calculations – NON-EOCT, Yearlong Course

A = 90 - 100 Course Average = Semester 1 (50%) + Semester 2 (50%)

B = 80 - 89 Midterm and Final Exams count as 2 summative assessments each.

ou – 69 midderni and Final Exams Count as 2 summade assessments each

C = 70 - 79 Semester Grade = 75% Summative + 25% Formative

Failing = Below 70 Concept of formative and summative assessment:

 $\underline{\text{http://www.forsyth.k12.ga.us/cms/lib3/GA01000373/Centricity/Domain/3199/assessment definitions \%20 copy.pdf}$

Approximate # of formative assessments: 10 per semester (2.5 % per assessment) – these include 4 mid-point unit quizzes (1 per unit), 4 homework quizzes, 1 progress check, and 1 model

Approximate # of summative assessments: 9 (7.5% per assessment) – these include 4 unit tests, 2 free response question sets, 2 lab grades (which include group lab reports and individual lab quizzes), and 1 midterm / final (2x weight). Per Lambert policy, summative evaluations may not be given until ALL formative feedback has been returned.

To encourage content mastery, students are allowed <u>one</u> re-attempt on the following assessment types: mid-point unit quizzes, homework quizzes, and lab quizzes. Students must come <u>outside</u> of class time and must complete the reattempt <u>before</u> the unit test. There will be different questions on the re-attempt, and that score will replace the original attempt's score (higher or lower). All other assessment types (including summatives) may only be attempted once – by the end of the unit you need to demonstrate your mastery.

Tentative Course Schedule & Assignments:

Weeks	Unit	Lab / Activities / Topics	Textbook Chapters (see each unit study guide for specifics)
4 wks	1 – Chemistry of life	Lab: Enzyme catalysis Activity: Protein folding, molecular modeling	1, 2, 3, 6, 29, 33
4 wks	2 – Cells and transport	Lab: Diffusion and osmosis Activity: Membrane modeling	4, 5, 29, 34
4 wks	3 – Metabolic pathways	Lab: Respiration Lab: Photosynthesis	6, 7, 8
4 wks	4 – Signaling pathways	Activity: Cell signaling and medicine Activity: Modeling mitosis	5, 9, 31, 32, 39
1.5 wks	Review and midterm		
3.5 wks	5 – Heredity and reproduction	Lab: Fruit fly inheritance Activity: Modeling meiosis	10 – 12, 30, 36
4 wks	6 – Molecular genetics	Lab: Bacterial transformation Activity: Modeling gene expression regulation	13 – 16, 18
4 wks	7 – Evolution	Lab: Hardy-Weinberg spreadsheet modeling Activity: Building phylogenetic trees	17, 18 – 23
2 wks	8 – Ecology	Lab: Modeling energy flow Activity: Modeling matter cycling	40 – 43
3 wks	AP review	Mock test final and correction	all

AP Exam- May 14th at 8:00am at Lambert High School

Guidelines for BYOT Use:

LHS teachers and students will work together to ensure the most productive learning environment in the classroom. Use of BYOT supports the use of technology devices as a tool in a student's education.

- Devices are to be "powered down" as the classroom teacher directs. Generally, students should put their phones at the top of their desks at the start of class (ask me if you need to use). You are welcome to bring a computer device for notes and completing work, but stay productive.
- Disregard of a directive by the classroom teacher to power down will be addressed with a progressive approach beginning with a verbal warning.
- Continued disregard of a directive by the classroom teacher to power down may be considered insubordination and addressed as a code of conduct violation.
- During summative assessments, devices will be powered down and put out of sight until all students in the classroom have completed the assessment and all materials have been collected by the teacher.

General class rules: Work hard. Be nice. There are no shortcuts. Assign yourself. If there is a problem, we look for a solution. If there is a better way, we find it. If a team member needs help, we give it. If we need help, we ask.

Availability for Extra Help: Due to COVID, LHS administration will advise us about time before / after school or lunch when teachers can work with students face to face. In the meantime, we can set up videoconferences through MS Teams or Google Meet. Contact me and I will work with you.

Makeup Work: Make up work is defined as work assigned during a student's absence, not work assigned prior to an absence. The student has five (5) school days upon returning to school to complete make-up work. The teacher has the discretion to grant a longer period to make up work, if there are extenuating circumstances.