

AP Biology Online Syllabus
AP By the Bay 2021
Allison Kittay - alliekittay@gmail.com

- Participants in the AP Biology Summer Institute will increase their knowledge of the [AP Biology Course and Exam Description](#).
- Participants will take a deep dive into each of the eight units and their learning objectives.
- Strategies and Pedagogical techniques for increasing student mastery of the learning objectives will be shared.
- Allison will show you how to prepare and execute many of the labs in the [AP Biology Laboratory Manual](#), and share lab tips she has learned over the 3 decades she has taught this course. Since many schools have limited budgets, we will learn effective and inexpensive labs and supplemental activities to maximize student learning even on the smallest of budgets.
- We will also learn how to use [AP Classroom](#) to develop each skill and practice in our students, and develop lesson plans that reinforce student learning.
- Participants will spend time becoming familiar with the format, sample questions and grading of the [AP Biology Exam](#).
- Participants will learn how to use the [Instructional Planning Report](#) to refine classroom instruction.
- Time will be provided for reflection and to work on your [course syllabus](#).
- Time will be provided for work on lesson planning for your course.
- Participants will meet for LIVE sessions from 8:30-11:30 (AM Session) and 1:30 - 3:30 (PM Session) Monday-Thursday. There will also be 1.5 hours of Asynchronous work assigned. On Friday, there will be a LIVE session from 8:30-12:30, for a total of 30 hours of instruction in AP Biology

	Monday 7/12	Tuesday 7/13	Wednesday 7/14	Thursday 7/15	Friday 7/16
CED TOPIC	Units 1 & 2	Units 3 & 4	Units 5 & 6	Units 7 & 8	The Exam
8:30-9:30	<p>Welcome! Introduction & Housekeeping</p> <p>How to Navigate our online APSI materials.</p>	<p>Welcome Back! Time for reflection and questions from yesterday's activities</p> <p>Sharing best practices: Sharing activities you chose for Units 1 and 2 and how you would assess student learning after those activities</p>	<p>Welcome Back! Time for reflection and questions from yesterday's activities</p> <p>Sharing best practices: Sharing activities you chose for Units 3 and 4 and how you would assess student learning after those activities</p>	<p>Welcome Back! Time for reflection and questions from yesterday's activities</p> <p>Sharing best practices: Sharing activities you chose for Units 5 and 6 and how you would assess student learning after those activities</p>	<p>Welcome Back! Time for reflection and questions from yesterday's activities</p> <p>Sharing best practices: Sharing activities you chose for Units 7 and 8 and how you would assess student learning after those activities</p>
9:30-11:30	<p>Topic 1 - The Course and Exam Description (CED): Science Practices (p13-15) and Big Ideas (p20) Course at a Glance (p22) Unit Guide "openers" (p26-28) "Treasure Hunt" of the new CED</p>	<p>Topic 4 - AP Classroom & AP Daily Guided Tour AP Classroom: *How to enroll your students *Using Personal Progress Checks to inform instruction *The Progress Dashboard & monitoring student learning *How to use the question bank to design assessments</p>	<p>Topic 3 - Strategies and Activities:</p> <p>1.PTC Genetics MiniOne Lab</p> <p>2.PGlo bacterial transformation Lab</p>	<p>Topic 3 - Strategies and Activities:</p> <p>1.Hardy Weinberg Activities including Fishy Frequencies</p> <p>2.Simpsons Diversity Index with playing cards</p>	<p>Virtual Guest: Glen Wolkenfeld of Sciencemusicvi deos</p> <p>Topic 3 - Strategies and Activities: Ideas for BLAST Lab</p> <p>Animal Behavior Lab</p> <p>HMI Ecology Resources</p>

11:30-12:30	<p>Asynchronous Activity: Deep Dive into Units 1 & 2</p> <p>For Units 1 & 2, complete an assignment labeling the following:</p> <ul style="list-style-type: none"> *Exam Weighting *Recommended Pacing *Big Ideas *Essential Questions *Science Practices *Common Misconceptions and how to avoid them. 	<p>Asynchronous Activity: Use the question bank to design an assessment for one of the learning activities for Units 1 or 2 you identified yesterday.</p>	<p>Asynchronous Activity: Explore AP Central Resources on your own.</p>	<p>Asynchronous Activity: Planning time: Work on your AP Biology Audit Syllabus</p> <p style="text-align: center;">OR</p> <p>Work on your class lesson plans</p>	<p>Exam Preparation Strategies</p> <p>Topic 5 - Using the Instructional Planning Report to identify student strengths and weaknesses and reflect on implications for instruction</p>
12:30-1:30	Lunch	Lunch	Lunch	Lunch	
1:30-3:30	<p>Topic 3 - Strategies and Activities:</p> <ol style="list-style-type: none"> 1. Penny Lab + Statistics 2. Why are Cells Small? Agar Cubes 3. Set up Water potential lab 4. Tips and Tricks for 	<p>Topic 3 - Strategies and Activities:</p> <ol style="list-style-type: none"> 1. Algal Beads - CR & PS 2. FLDA - PS Inquiry approach 3. CER data presentation 	<p>Topic 3 - Strategies and Activities:</p> <p>Tips and Tricks: Mitosis in Onion Root tips with Chi Square</p> <p>Meiosis in Sordaria</p> <p>Topic 2 -</p>	<p>Topic 3 - Biofuel Enzyme Lab with Damon Tighe (Bio-Rad)</p>	

	Osmosis in Dialysis Bags		Diversity & Inclusion and Equity & Access		
3:30-4:00	<p>Asynchronous Activity - Choose one activity you would use to teach a topic in Unit 1 or Unit 2. Identify the topic, Big Idea, & Science Practice. Look at the sample instructional activities in the CED for some suggestions.</p> <p>What is an instructional approach you could use to improve/supplement this activity?</p> <p>How could you assess student learning?</p>	<p>Asynchronous Activity: Choose one activity you would use to teach a topic in Unit 3 or Unit 4. Identify the topic, Big Idea, & Science Practice. Look at the sample instructional activities in the CED for some suggestions.</p> <p>What is an instructional approach you could use to improve/supplement this activity?</p> <p>How could you assess student learning?</p>	<p>Asynchronous Activity: Choose one activity you would use to teach a topic in Unit 5 or Unit 6. Identify the topic, Big Idea, & Science Practice. Look at the sample instructional activities in the CED for some suggestions.</p> <p>What is an instructional approach you could use to improve/supplement this activity?</p> <p>How could you assess student learning?</p>	<p>Asynchronous Activity: Choose one activity you would use to teach a topic in Unit 7 or Unit 8. Identify the topic, Big Idea, & Science Practice. Look at the sample instructional activities in the CED for some suggestions.</p> <p>What is an instructional approach you could use to improve/supplement this activity?</p> <p>How could you assess student learning?</p>	

Live	5 hr	5 hr	5 hr	5 hr	4 hr
Asynchronous	1.5 hr	1.5 hr	1.5hr	1.5 hr	0 hr
Total Workshop Hours	6.5	6.5	6.5	6.5	4 = 30 hr. total
Lab versions of Laboratory Investigations for AP Biology Lab Manual Included	Lab 4	Labs 5 & 6	Labs 7, 8, & 9	Lab 2 & 13	Lab 3 & 12