**AP Biology Institute 2020**

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Participants in the AP Biology Summer Institute will increase their knowledge of, and comfort level with, the updated AP Biology Course and Exam Description. We will perform several AP Biology labs, from setup to analysis, and discuss how to tweak labs you currently use to make them student-driven and inquiry based. We will share best practices and hints on what works in the AP Biology classroom to improve student achievement. During the week we will also look at sample syllabi, textbooks, and additional resources. In addition, we will spend time familiarizing ourselves with the format, sample questions and grading of the AP Biology exam. If there is interest, time will also be provided to work on your course syllabus.

**4-Day Agenda**

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| **Day 1** | **Day 3** |
| IntroductionsOverview of Workshop ObjectivesIntroduction to Instructional ResourcesPreviewing the Science PracticesOverview of the Course FrameworkUnpacking the Course and Exam DescriptionExploring the Unit GuidesLab #1: Penny Lab and Statistical AnalysisResources to Teach Statistical AnalysisLab #2: Surface Area/VolumeLab #3: Unknown Solutions (Osmosis Lab)Calculating Water Potential | Instructional ApproachesScience Practice 6: ArgumentationAP Question BankAP Course AuditUsing the Instructional Planning ReportsLab #4b: Bacterial Transformation Day 2Lab #7: Photosynthesis |
| **Day 2** | **Day 4** |
| The AP Biology Exam (and Other Assessments)Preparing for and Assessing Lab SkillsLab #4a: Bacterial Transformation Day 1Lab #5: MiniOne PCR/Gel ElectrophoresisLab #6: BioinformaticsPlanning Your CourseAP Classroom | Scoring FRQsExploring Other ResourcesLab #7: Hardy-Weinberg and Mathematical ModelingLab #8: Enzyme Catalysis with Yeast SpheresLab #4c: Bacterial Transformation Day 3Planning Time |