**AP Biology Institute 2020**

**Kristi Sutton (suttonk@bsd405.org)**

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**

|  |  |
| --- | --- |
| **Day 1** | **Day 3** |
| Introductions  Overview of Workshop Objectives  Introduction to Instructional Resources  Previewing the Science Practices  Overview of the Course Framework  Unpacking the Course and Exam Description  Exploring the Unit Guides  Lab #1: Penny Lab and Statistical Analysis  Resources to Teach Statistical Analysis  Lab #2: Surface Area/Volume  Lab #3: Unknown Solutions (Osmosis Lab)  Calculating Water Potential | Instructional Approaches  Science Practice 6: Argumentation  AP Question Bank  AP Course Audit  Using the Instructional Planning Reports  Lab #4b: Bacterial Transformation Day 2  Lab #7: Photosynthesis |
| **Day 2** | **Day 4** |
| The AP Biology Exam (and Other Assessments)  Preparing for and Assessing Lab Skills  Lab #4a: Bacterial Transformation Day 1  Lab #5: MiniOne PCR/Gel Electrophoresis  Lab #6: Bioinformatics  Planning Your Course  AP Classroom | Scoring FRQs  Exploring Other Resources  Lab #7: Hardy-Weinberg and Mathematical Modeling  Lab #8: Enzyme Catalysis with Yeast Spheres  Lab #4c: Bacterial Transformation Day 3  Planning Time |