

Pre-AP Science

Workshop Description

The focus of this workshop will be the College Board’s Pre-AP Vertical Team curriculum. The goal of this workshop is for participants to learn how to align a curriculum through research-based methods of instruction in order to build students' scientific skills and knowledge. After attending this workshop, participants will be able to:

- Expand their knowledge of how to build students' scientific reasoning skills through research-based instruction by:
 - Teaching science practices.
 - Building students' understanding of unifying concepts.
 - Creating a learner-centered classroom.
- Vertically align science curriculum by:
 - Using the College Board's Science Curriculum Alignment Guide.
 - Making connections of unifying concepts and science practices across disciplines.
- Create an Action Plan for launching or strengthen their AP Vertical Team.
- Other workshop highlights include theme-based lessons in Biology, Environmental Science, Chemistry and Physics that can be used across grades 8-12.

Silver State AP Summer Institute – Pre-AP Science Agenda

DAY 1 – June 21	DAY 2 – June 22	DAY 3 – June 23	DAY 4 – June 24
Welcome and Introductions Participant Needs Assessment What is Pre-AP? College Board Materials & Resources: AP Central AP Audit Pre-AP Strategies – Focus on Inquiry Labs Building Proficiency Theme based activities across the AP Science Curriculum Biology: Evolution 2009 AP Biology Exam Q 3	Pre-AP® Strategies: AP Vertical Teams® in Science Laying the Foundation Research Based Instruction Build Foundational Knowledge	Pre-AP® Strategies: AP Vertical Teams® in Science Overview of Workshop Goals and Learning Outcomes Research Based Instruction Curriculum alignment	Pre-AP Strategies – Building Proficiency Theme based activities across the AP Science Curriculum Physics: Optics AP Physics Exam Q <i>Cow Eye Dissection</i> (G 6-8) <i>Measuring Focal Length</i> (G 9-10) <i>Optics demo</i> (AP Level) Environmental Science: Energy APES Exam Q <i>Food Webs</i> (G 6-8) <i>Field Study Project</i> (G 9) <i>Measuring Productivity</i> (G10) <i>Energy Use</i> (AP Level)
Lunch	Lunch	Lunch	Lunch
<i>Adaptation Activity</i> (G 6-8) <i>Punchbug Lab</i> (G 9) <i>Island Evolution Lab</i> (G 10) <i>AP Biology Lab 8</i> (AP level) <i>Fishy Frequencies pre-lab</i>	Deepen and Apply Understanding Reflect and Assess	Deepen and Apply Understanding Reflect and Assess Sustaining the Vertical Team Concept Plan	Chemistry : Electrons AP Chemisrty Exam Q Closing and Evaluation

