AP PHYSICS 2 for New and Experienced Teachers

Instructor: Stephen Schuh

<u>Day 1</u> (6.75 contact hours)

- Introductions
  - Experience & Expectations
  - AP Frameworks
  - Project Planning & Assignment
- Graduate Credit
- Curriculum Overview
  - History of the AP Physics 1 Rewrite
  - New AP Physics Curriculum
  - AP Problem Styles
    - Multiple Choice
    - Free Response
- Intro to AP Inquiry-based Labs

<u>Day 2</u> (8 contact hours)

- Administrative Approaches
  - AP Audit Tutorial
  - AP Equity
  - Course Recruitment
- Topic – Fluid Dynamics (can be replaced by other topic at participant request)
  - Statics (Pascals/Archimedes)
  - Dynamics (Bernouli's/Continuity)
- Direct Inquiry Labs
  - Thermodynamics
  - Fluids
- Course Planning
  - Big Idea Approaches
  - Course Syllabi
  - Test Planning
- Participant Led Sharing
  - Lecture Approaches
  - Demonstrations
  - Laboratory Ideas

<u>Day 3</u> (8 contact hours)

- Pacing
  - Recursive Pedagogy
  - Math vs Concept
  - Demo vs Explanation
- Topic - RC Circuits (can be replaced by other topic at participant request)
  - Ohm's Law
  - Parallel & Series
  - Energy & Power
  - Predictive Circuit Lab
  - Capacitors (Steady-state/Transient)
- Open Inquiry Labs
  - Circuits
  - Optics
- AP Problem Building
  - Styles & History
  - Test/Rubric Reviews
  - Self-Led Investigation
  - Short Answer
  - Exploratory Answer

<u>Day 4</u> (7.25 contact hours)

- Test Construction
  - Free Response
  - Multiple Choice
- Teacher Resources
  - Problems
  - Texts
  - Labs
- AP Exercise Construction and In-class Project(s)

GRADUATE CREDIT REQUIREMENTS (13-19 hours)

- Daily Workshop "Homework" (AP style questions, etc) (60-90 min each day) x3
- Daily Workshop Activities (AP style rubrics, etc) (60-90 min each day) x3
- Collegeboard Syllabus Creation (3-4 hours)
- AP-style curriculum development (3-4 hours)
- Inquiry Lab Creation (1-2 hours)