



## Physical Science and Everyday Thinking

Indicates a research-demonstrated benefit

### Overview

A guided-inquiry conceptual physical science course designed to help students develop a deep conceptual understanding of big ideas.



#### Type of Method

Full curriculum



#### Level

**Designed for:** Teacher Prep Course

**Can be adapted for:** Teacher Professional Development



#### Setting

**Designed for:** Studio , Lecture - Small (<30 students)

**Can be adapted for:** Lab



#### Coverage

Few topics with great depth



#### Topics

Mechanics, Electricity / Magnetism, Thermal / Statistical



#### Instructor Effort

Medium



#### Resource Needs

Projector, Computers for students, Advanced lab equipment, Cost for students, Tables for group work



#### Skills

**Designed for:** Conceptual understanding , Metacognition

**Can be adapted for:** Making real-world connections, Using multiple representations



#### Research Validation

**Based on research into:** theories of how students learn , student ideas about specific topics

**Demonstrated to improve:** conceptual understanding , beliefs and attitudes



#### Compatible Methods

[PhET](#), [JiTT](#), [Physlets](#), [SCALE-UP](#), [OSP](#), [LA Program](#), [CPU](#)



#### Similar Methods

[PBI](#), [PET](#), [LEPS](#)



#### Developer(s)

Fred Goldberg, Rebecca Kruse, Steve Robinson, Valerie Otero and Nephi Thompson



#### Website

<http://cpucips.sdsu.edu/web/pset/>

