



Physics and Everyday Thinking

Indicates a research-demonstrated benefit

Overview

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



Type of Method

Full curriculum



Level

Designed for: Teacher Prep Course

Can be adapted for: Teacher Professional Development, High School, Intro College Conceptual



Setting

Designed for: Studio

Can be adapted for: Lecture - Small (<30 students) , Lab



Coverage

Few topics with great depth



Topics

Mechanics, Electricity / Magnetism, Waves / Optics



Instructor Effort

Medium



Resource Needs

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



Skills

Designed for: Conceptual understanding , Metacognition , Using multiple representations

Can be adapted for: Making real-world connections



Research Validation

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

Demonstrated to improve: conceptual understanding , beliefs and attitudes

Studied using: research at multiple institutions



Compatible Methods

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



Similar Methods

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



Developer(s)

Fred Goldberg, Valerie Otero and Steve Robinson



Website

<http://petproject.sdsu.edu/>

