

PRISMS PLUS

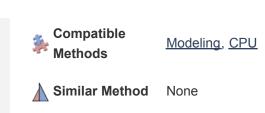
Indicates a research-demonstrated benefit

Overview

A high school physics curriculum and professional development program that uses a learning cycle pedagogy, inexpensive materials, and technology.

Type of Method	Instructional strategy, Full curriculum
X: Level	Designed for: High School , Teacher Professional Development Can be adapted for: Teacher Prep Course, Middle School, Intro College Algebra-based, Intro College Conceptual
⋒ Setting	Designed for: Lecture - Small (<30 students) , Studio Can be adapted for: Lecture - Large (30+ students), Recitation/Discussion Session, Lab
Coverage	Few topics with great depth, Teachers can select from many topics, but only cover a few in depth.
Topics	Mechanics, Electricity / Magnetism, Waves / Optics, Thermal / Statistical, Modern / Quantum
Instructor Effort	Medium
Resource Needs	Computers for students, Simple lab equipment, Advanced lab equipment
Skills	Designed for: Conceptual understanding , Problem-solving skills , Making real-world connections , Using multiple representations, Designing experiments Can be adapted for: Lab skills, Metacognition
Research Validation	Based on research into: theories of how students learn , student ideas about specific topics , research into instructional practice Demonstrated to improve: conceptual understanding , problem-solving skills , beliefs and attitudes

Studied using: classroom observations 🤏 , analysis of written work 🤏



Lawrence Escalada, Roy Unruh, Timothy Cooney, and master high school physics Developer(s) teachers

http://www.physics.uni.edu/prisms/prisms-plus Website







