Guide

Intuitive Quantum Physics (IQP)

Indicates a research-demonstrated benefit

Overview

Tutorials for a course introducing non-science majors to basic ideas of quantum mechanics, including spectroscopy, simple molecules, and tunneling.

Level	**Designed for:** Intro College Conceptual **Can be adapted for:** Upper-level Undergraduate, Graduate School
Setting	**Designed for:** Lecture - Large (30+ students) , Lab **Can be adapted for:** Lecture - Small (<30 students), Studio
Coverage	Few topics with great depth
Topics	Modern / Quantum
Instructor Effort	High
Resource Needs	TAs / LAs, Advanced lab equipment, Tables for group work
Skills	**Designed for:** Conceptual understanding , Making real-world connections , Metacognition **Can be adapted for:** 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 **Studied using:** student interviews , classroom observations
Compatible Methods	Peer Instruction, PhET, JiTT, CGPS, Physlets, SCALE-UP, OSP, Thinking Problems, LA Program, CAE TPS, Tutorials, Clickers
Similar Method	None
Developer(s)	Jeffrey T. Morgan, Michael C. Wittmann, Eleanor C. Sayre, Katrina E. Black
Website	http://perlnet.umaine.edu/iqp/

Teaching materials

You can download all course materials including tutorials, quizzes, and movies from the developer's website: http://perlnet.umaine.edu/IQP