Guide

New Model Course in Applied Quantum Physics

Indicates a research-demonstrated benefit

Overview

Resources for teaching introductory quantum mechanics and modern physics with an emphasis on concepts and applications.

Type of Method	Curriculum supplement, Tutorials
Level	**Designed for:** Intermediate **Can be adapted for:** Teacher Prep Course, Teacher Professional Development, High School, Intro College Calculus-based, Intro College Algebra-based, Intro College Conceptual, Upper-level Undergraduate
Setting	**Designed for:** Lecture - Small (<30 students), Recitation/Discussion Session, Homework **Can be adapted for:** Lecture - Large (30+ students), Studio
Coverage	Many topics with less depth
Topics	Modern / Quantum
Instructor Effort	Medium
Skills	**Designed for:** Conceptual understanding, Making real-world connections
Research Validation	**Based on research into:** theories of how students learn , student ideas about specific topics
Compatible Methods	Peer Instruction, PhET, JiTT, CGPS, Physlets, SCALE-UP, OSP, Thinking Problems, LA Program, CAE TPS, CU Modern, QuILTs, PI QM, Tutorials, Clickers
Similar Methods	ABP Tutorials, CU Modern
Developer(s)	Michael Wittman, Richard Steinberg, and Edward Redish
Website	http://www.physics.umd.edu/perg/qm/qmcourse/welcome.htm

Teaching materials

You can download the tutorials, pre-tests, homework, essay questions, exam questions, software, and other handouts from the New Model Course website.

These tutorials have also been published as a book by Wiley as the Activity-Based Tutorials Volume 2. You can order the book from Wiley or from Amazon.