

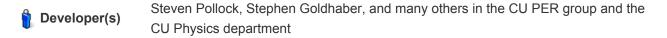
CU upper-division QM curriculum

Indicates a research-demonstrated benefit

Overview

Supplementary activities for upper-level QM I. All materials are modular and can be mixed and matched with any other teaching strategy or materials.

✤ Type of Method	Full curriculum, Curriculum supplement, Tutorials
📉 Level	Designed for: Upper-level Undergraduate 🛸 Can be adapted for: Intermediate, Graduate School
fit Setting	 Designed for: Lecture - Large (30+ students) (Lecture - Small (<30 students) , Recitation/Discussion Session, Homework Can be adapted for: Out-of-class tutorials
🧧 Coverage	Many topics with less depth, Traditional upper-division Quantum I coverage (e.g. first half of Griffiths text)
🗾 Topics	Modern / Quantum
Instructor Effort	Medium
Resource Needs	TAs / LAs, Clickers / polling method, Projector
👔 Skills	Designed for: Conceptual understanding 🔹 , Problem-solving skills, Using multiple representations Can be adapted for: Making real-world connections, Metacognition
Research Validation	Based on research into: theories of how students learn 👒 Studied using: student interviews 👒 , classroom observations 🛸
Compatible Methods	Peer Instruction, PhET, JITT, CGPS, Physlets, SCALE-UP, OSP, LA Program, CAE TPS, TEFA, CU Modern, QuILTs, Paradigms, PI QM, Tutorials, Clickers
Similar Methods	CU Modern, CU E&M, QuILTs, Paradigms, PI QM



Website <u>http://www.colorado.edu/sei/departments/physics_3220.htm</u>

Teaching materials

You can download all course materials, including lecture slides, clicker questions, homework, exams, and solutions from the developer's website (you'll need to ask for a password to access solutions): <u>http://www.colorado.edu/sei/departments/physics_3220.htm</u>

