

Syllabus of the 20-10-228: Quantum Mechanics 1 Course

Fall 2012

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1. Old Quantum Physics
2. Wave – Particle Duality
3. Schrodinger Equation
4. Time Dependent Equation
5. Eigenvalue Problem
6. One Dimensional Potentials
7. Wave Mechanics
8. Operator Methods
9. Angular Momentum
10. The Schrodinger Equation in 3D
11. The Hydrogen Atom
12. Matrix Representation of Operators

Reference Book:

Quantum Physics, 3rd Edition, *Stephen Gasiorowicz*, (John Wiley & Sons); 2003.

Links to the book:

<http://www.amazon.com/Quantum-Physics-Third-Stephen-Gasiorowicz/dp/0471057002>

<http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0471057002.html>

Links to IUT Web Course:

<http://ivut.iut.ac.ir/login.php?course=759>