# PHY-405: Quantum Mechanics

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## Outline

- 1. Brief review
- 2. Dirac formalism
- 3. Hydrogen problem
- 4. Spin/angular momentum
- 5. Perturbation theory
- 6. WKB
- 7. Radiation
- 8. Scattering
- 9. EPR, Bell
- 10. Quantum computing.

#### Reference Material

- D.J. Griffiths, Quantum Mechanics, Pearson
- N. Zettili, Quantum Mechanics, Wiley

## Grade

The grade will be: Hw (20%) + Mid (40%) + Fin (40%)

#### Grader

TBA

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If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, 128 ECC Building, (631) 632-6748, or via e-mail at: sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

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