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

Student Accessibility Support Center Statement

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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Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at

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