

PHY-512: Quantum Mechanics II

Ismail Zahed

NTG-C141 Ext: 2-8129 Office Hour: F 3:4

zahed@tonic.physics.sunysb.edu

Outline

1. Symmetries
2. C,P,T
3. Hydrogen
4. Perturbation
5. Variational
5. Many Particles
7. Scattering
8. Dirac equation

Reference Material

J. Sakurai, Modern Quantum Mechanics, ed. Adison wesley

Grade

The grade will be : Hw (1/3) + Mid (1/3) + Fin (1/3)

Grader

TBA

ACADEMIC INTEGRITY Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another persons work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>

ELECTRONIC COMMUNICATION Email to your University email account is an important way of communicating with you for this course. For most students the email address is `firstname.lastname@stonybrook.edu`, and the account can be accessed here: <http://www.stonybrook.edu/mycloud>. *It is your responsibility to read your email received at this account.*

For instructions about how to verify your University email address see this: <http://it.stonybrook.edu/help/kb/checking-or-changing-your-mail-forwarding-address-in-the-epo> . You can set up email forwarding using instructions here: <http://it.stonybrook.edu/help/kb/setting-up-mail-forwarding-in-google-mail> . If you choose to forward your University email to another account, we are not responsible for any undeliverable messages.

RELIGIOUS OBSERVANCES See the policy statement regarding religious holidays at <http://www.stonybrook.edu/registrar/forms/RelHolPol>

DISABILITIES If you have a physical, psychiatric/emotional, medical or learning disability that may impact on your ability to carry out assigned course work, you should contact the staff in the Disability Support Services office [DSS], 632-6748/9. DSS will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation of disability is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the website <http://www.sunysb.edu/ehs/fire/disabilities.shtml>

CRITICAL INCIDENT MANAGEMENT Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the University Police and the Office of University Community Standards any serious disruptive behavior that interrupts teaching, compromises the safety of the learn-

ing environment, and/or inhibits students ability to learn. See more here:
<http://www.stonybrook.edu/sb/behavior.shtml>