Syllabus - Graduate Quantum Mechanics II

Class Meetings: 5:45 p.m. - 7:00 p.m. -- Tuesdays and Thursdays
Oceanography & Physics (OCNPS) Building Room 303
Recitation Sessions by mutual agreement

Instructor: Dr. Sebastian E. Kuhn
Eminent Scholar & Professor of Physics
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Web: http://www.odu.edu/~skuhn/
Office hours: Tuesdays 2:00 – 3:00 p.m. in the Physics Learning Center (lobby 2nd floor PSB II) and by appointment (just ask me after class, send email or call)


A. Messiah: "Quantum Mechanics" (2-volume edition bound as 1 book), Dover Publication 1999. A comprehensive collection of material, cheap on Amazon etc.

Grading Scheme: Homework (30%), Midterm (15%), Participation (15%), Final (40%)
Grading Scale: A: 90-100% A-: 85-90% B+: 80-85% B: 75-80%
B-: 70-75% Below 70%: C (=failing)
INTRODUCTION

This is the second semester of the 2-semester course on Quantum Mechanics. This semester will cover the topics left out in the first semester: Multi-particle states (including statistics, entanglement and Bosons/Fermions), classical limit and path integral formulation; variational methods, time-independent and time-dependent perturbation theory, and scattering. We will mostly follow the content of the book by Shankar, but add some topics from other sources. A preliminary schedule is posted separately.

Policy on Cooperation

I consider it advantageous if students cooperate with each other on homework and studying. In fact, I encourage students very strongly to meet with each other for regular discussions and to tackle assignments together. However, I require that each student turn in their own (hand- or computer-written) version of each homework and assignment. You must be able to demonstrate that you understand and can reproduce any solution you hand in. Also, NO cooperation is allowed on the Midterm and Final (in-class) Exams – everybody has to do ALL of the work her/himself. I consider it unethical and a violation of the honor code to copy the solution of a homework problem or an Exam verbatim from another student's solution or from a book. All material used (other than informal discussions) must be properly cited. In this context, I want to remind everyone of the University policy: Any official sanction for cheating, including the assignment of a grade of F for a quiz or for a course as a penalty for cheating, will appear on the student's permanent academic transcript.