

COURSE DESCRIPTION

Instructor: Dr. David Kagan

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Office Hours: MF 8-8:50am in PS 106C and others times by appointment. Note that I will only be on campus Monday and Friday.

Text: David Griffiths, *Introduction To Quantum Mechanics (2nd Edition)*.

Software: *Mathematica* will be used and discussed in class. You may use other mathematical software at your discretion.

Prerequisites: Phys 200A and Math 110 (Phys 200B, 201AB, 202AB recommended)

Course Summary: We will cover part I (chapters 1 - 5). The course will be taught in a discussion format. Each class we will discuss the problems that will be collected at the next class. You must therefore be responsible for completing those problems that are due and for getting started on the problems that we will be discussing.

The Rules: To keep the discussion format of the class running it is essential that homework be done on time. **Late homework will have a 20% deduction for each class period that it is late.**

COURSE SCHEDULE

DAY	DATE	DISCUSS	TURN IN
M F	Aug 25 29	Exp's leading to wave/particle theory Ch 1 - 1.1, 1.2, 1.3, 1.4, 1.5	
M F	Sep 1 5	*** LABOR DAY *** Ch 1 - 1.7, 1.8, 1.9 Ch 2 - 2.1, 2.2	Ch 1 - 1.1, 1.2, 1.3, 1.4, 1.5
M F	8 12	Ch 2 - 2.4, 2.5 Ch 2 - 2.6, 2.7 time evolution	Ch 1 - 1.7, 1.8, 1.9 Ch 2 - 2.1, 2.2 Ch 2 - 2.4, 2.5
M F	15 19	Ch 2 - 2.10, 2.11, 2.12 Ch 2 - 2.15, 2.16, 2.17 Ch 2 - 2.18, 2.20	Ch 2 - 2.6, 2.7 time evolution Ch 2 - 2.10, 2.11, 2.12 Ch 2 - 2.15, 2.16, 2.17
M F	22 26	Ch 2 - 2.21, 2.22 Ch 2 - 2.23, 2.24, 2.26 Ch 2 - 2.27, 2.28	Ch 2 - 2.18, 2.20 Ch 2 - 2.21, 2.22 Ch 2 - 2.23, 2.24, 2.26
M F	29 Oct 3	Ch 2 - 2.29, 2.32 Ch 2 - 2.33, 2.34ab	Ch 2 - 2.27, 2.28 Ch 2 - 2.29, 2.32
M F	6 10	FIRST EXAM Chapters 1 & 2 Ch 3 - 3.2, 3.3, 3.5 Ch 3 - 3.6, 3.7, 3.8b	Ch 2 - 2.33, 2.34ab Ch 3 - 3.2, 3.3, 3.5
M F	13 17	Ch 3 - 3.11, 3.12 Ch 3 - 3.13, 3.14, 3.15 Ch 3 - 3.17, 3.18	Ch 3 - 3.6, 3.7, 3.8b Ch 3 - 3.11, 3.12 Ch 3 - 3.13, 3.14, 3.15
M F	20 24	Ch 3 - 3.22, 3.23, 3.25, 3.26 Ch 3 - 3.27, 3.31, 3.33, 3.37	Ch 3 - 3.17, 3.18 Ch 3 - 3.22, 3.23, 3.25, 3.26
M F	27 31	QM Made Transparent SECOND EXAM Chapter 3	Ch 3 - 3.27, 3.31, 3.33, 3.37
M F	Nov 3 7	Ch 4 - 4.1, 4.2, 4.38 Ch 4 - 4.3, 4.5, 4.6 Ch 4 - 4.39, 4.13, 4.43	Ch 4 - 4.1, 4.2, 4.38 Ch 4 - 4.3, 4.5, 4.6
M F	10 14	*** VETERAN'S DAY *** Ch 4 - 4.14, 4.15, 4.16 Ch 4 - 4.18, 4.19, 4.22	Ch 4 - 4.39, 4.13, 4.43 Ch 4 - 4.14, 4.15, 4.16
M F	17 21	Ch 4 - 4.24, 4.25, 4.26 Ch 4 - 4.27, 4.28, 4.29 Ch 4 - 4.52, 4.55	Ch 4 - 4.18, 4.19, 4.22 Ch 4 - 4.24, 4.25, 4.26 Ch 4 - 4.27, 4.28, 4.29
		*** THANKSGIVING BREAK ***	
M F	Dec 1 5	Ch 4 - 4.34, 4.35, 4.36 Ch 5 - 5.1, 5.2 Ch 5 - 5.4, 5.5	Ch 4 - 4.52, 4.55 Ch 4 - 4.34, 4.35, 4.36 Ch 5 - 5.1, 5.2
M F	8 12	Ch 5 - 5.6, EPR Schroedinger's Cat	Ch 5 - 5.4, 5.5 Ch 5 - 5.6, EPR problem
TBA	TBA	>>> FINAL EXAM <<<	Time: TBA