PHYS 701: Quantum Mechanics II
TuTh 10:00 – 11:15 AM, Sherman 007

Instructor: Jason Kestner
Office: Physics 217
Office Hours: Th 11:15AM–12:15PM, or anytime my door is ajar
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Textbook: Principles of Quantum Mechanics, Shankar, 2nd ed.

Course Description

This course is a continuation of PHYS 601, and covers topics such as addition of angular momenta, perturbation theory, path integral formulation, and field quantization. As is standard for a graduate level course, you are expected to read the textbook and learn on your own. My role is to assist you in the process, like a personal trainer, but you have to put in the work for yourself! My expectation is that you will spend **10 hours/week studying outside of class**, divided roughly equally between reading the textbook and solving problems.

Homework

I will post a set of worked example problems on the course BlackBoard site to develop your skills. Your homework will consist of writing your own personal solutions to these problems. I will grade each solution on a binary scale, 0 or 1. The reasons I am collecting your solutions at all are, i) to make sure you actually work the problems, and ii) so I can give you feedback on your solution style and your development as a working, communicating physicist.

The way I intend for you to work is to start with a blank piece of paper without looking at my solution. If you get stuck for more than 15 minutes, consult my solution just enough to get unstuck, then continue on your own brainpower. If you find yourself relying heavily on my solution manual (and especially if you would not know how to start a problem without it), stop!, you are just shooting yourself in the foot for the exams – you should talk to me in class or in my office so we can figure out what you can change.

You may use Mathematica or other software unless instructed otherwise, but if you do so you must include a printout of the code and its output.

Exams

There will be two midterm exams and one final exam. The final exam will be cumulative.

Overall Grades

Your course grade will be determined by the following components:

Homework	10%
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	40%

This course will not be graded on a curve. Total scores translate to grades in the following way:

Score	Grade
90–100	A
88–90	A-
85–88	B+
81–85	B
78–81	B-
75–78	C+
71–75	C
68–71	C-
65–68	D
0–65	F

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

Title IX, Equity, and Inclusion

Federal law mandates notice of the policies available at https://ecr.umbc.edu/sample-title-ix-responsible-employee-syllabus-language/.