College of Arts & Sciences

Department of Physics

PHY 6730, Quantum Mechanics 4 Credit Hours Fall 2018

Instructor:	Eugene Surdutovich	E-mail:	surdutov@oakland.edu
Office:	172 Hannah Hall	Office phone:	248-370-3409
Class Time:	MWF, 9:20 – 10:27 am	Office hours:	MWF 10:30-11:30am
Auditorium:	185 MSC		
Textbook:	Introduction to quantum mechanics by Hall, 2005	y D. Griffiths, S	econd edition, Pearson/Prentice

Homework: Every week, I will assign homework. Late homework will not be graded. No e-mailed homework is accepted. The homework is worth 20% of the final grade.

Exams: There will be three exams. The material covered will be discussed on pre-exam reviews.

Make-up Policy: In order to be fair to the majority of students who take the exams on time, the general policy is: *NO make-up exams* will be given. A score of zero will be entered for missed tests. If you cannot be present for an exam due to an unavoidable emergency, contact me before the exam if possible or as quickly as possible after the exam to see if an exception can be made.

С

C-

D+

D

F

65-69

60-64

55-59

50-54

< 50

Grading Schedule and Scale:

Exam 1	25%	10%	А	96-100
Exam 2	25%	25%	A-	90-95
Final Exam	30%	45%	B+	85-89
Homework	20%	20%	В	80-84
Total	100%	100%	B-	75-79
			C+	70-74

Week	Day	Date	Lecture Topics	Chapters
1	W 9/5 Introduction to quantum mechanics		1	
1	F	9/7	Continued	1
2	М	9/10	Continued	1
	W	9/12	Time-independent Schrödinger equation	2
	F	9/14	Continued	2
	М	9/17	continued	2
3	W	9/19	Operators and formalism	3
	F	9/21	Continued	3
4	М	9/24	continued	3
	W	9/26	continued	3
	F	9/28	Spherical coordinates, H-atom, angular momentum, spin	4
5	М	10/1	continued	4
	W	10/3	continued	4
	F	10/5	continued	4
M	М	10/8	continued	4
6	W	10/10	Exam 1	
	F	10/12	Identical particles	5
7	Μ	10/15	continued	5
	W	10/17	continued	5
	F	10/19	Time-independent perturbation theory	6
8	Μ	10/22	continued	6
	W	10/24	continued	6
	F	10/26	continued	6
9	Μ	10/29	WKB approximation	8
	W	10/31	continued	8
	F	11/2	continued	8
10	Μ	11/5	continued	8
	W	11/7	Time-dependent perturbation theory	9
	F	11/9	continued	9
11	Μ	11/12	continued	9
	W	11/14	continued	9
	F	11/16	Exam 2	
12	Μ	11/19	Adiabatic approximation	10
	W	11/21	Continued	10
	F	11/23	Thanksgiving recess	
13	M	11/26	Continued	10
	W	11/28	Continued	10
	F	11/30	Scattering	11
	M	12/3	continued	11
14	W	12/5	continued	11
	F	12/7	continued	11
15	W	12/12	8:00 – 11:00 p.m. Final Exam, cumulative	

Tentative Course Schedule