Syllabus(2024-2nd semester)

Course	Quantum Mechanics II	Department	Physics	Office Hours	화4교시 목5교시
Course No. and Class	G12133-01	Hours	3.0	Academic Credit	3.0
Professor	Changrim Ahn		Office	Science Building A A524	
Telephone	02-3277-2387		E-MAIL	ahn@ewha.ac.kr	
Value of competence			Keyword		

1. Course Description

Quantum Mechanics II

2. Prerequisites

Quantum Mechanics I

3. Course Format

Lecture	Discussion/Presentation	Experiment/Practicum	Field Study	Other
100%	0%	0%	0%	0%

- explanation of course format :

Mostly, lectures in class. But due to scientific workshops, I may use pre-recorded lectures on two or three times.

4. Course Objectives

Approximate methods for applying Quantum Mechanics to Various physical problems

5. Evaluation System

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Midterm Exam	Final Exam	Quizzes	Presentation	Projects	Assignments	Participation	Other
50%	50%	0%	0%	0%	0%	0%	0%

* Evaluation of group projects may include peer evaluations.

- explanation of evaluation system

Mid-Term exam Oct 26 (Sat) 14:00 - / Final-Term exam Dec 14 (Sat) 14:00 -

6. Required Materials

J. J. Sakurai, Modern Quantum Mechanics

7. Supplementary Materials

8. Optional Additional Readings

9. Course contents

Week	Date	Topics, Materials, Assignments
Week 1	2024/09/03(TUE)	Chap 5. Approximation Methods
Week 2	2024/09/10(TUE)	Chap 5. Approximation Methods
Week 3	2024/09/17(TUE)	Chuseok (Korean Thanksgiving Day)
Week 4	2024/09/24(TUE)	Chap 5. Approximation Methods
Week 5	2024/10/01(TUE)	Chap 5. Approximation Methods
Week 6	2024/10/08(TUE)	Chap 5. Approximation Methods
Week 7	2024/10/15(TUE)	Chap 6. Scattering Theory
Week 8	2024/10/22(TUE)	Chap 6. Scattering Theory
Week 9	2024/10/29(TUE)	Chap 6. Scattering Theory
Week 10	2024/11/05(TUE)	Chap 7. Identical Particles
Week 11	2024/11/12(TUE)	Chap 7. Identical Particles
Week 12	2024/11/19(TUE)	Chap 7. Identical Particles
Week 13	2024/11/26(TUE)	Chap 8. Relativistic Quantum Mechanics
Week 14	2024/12/03(TUE)	Introduction to Quantum Computer 1: Basic Gates
Week 15	2024/12/10(TUE)	Introduction to Quantum Computern 2: Famous Algorithms
Makeup Classes 1	2024/10/18(FRI)	Chap 6. Scattering Theory (recorded)

10. Course Policies

* For laboratory courses, all students are required to complete lab safety training.

11. Special Accommodations

* According to the University regulation #57, students with disabilities can request special accommodation related to attendance, lectures, assignments, and/or tests by contacting the course professor at the beginning of semester. Based on the nature of the students' requests, students can receive support for such accommodations from the course professor and/or from the Support Center for Students with Disabilities (SCSD).

***** The contents of this syllabus are not final—they may be updated.