

Course Code	PHYS8202 (RPG)		
Title	Special Topics in Physics		
Offering Department	Physics		
Course Co-ordinator	Prof S Z Zhang Physics		
Course Co-ordinator Email	shizhong@hku.hk		
Teachers Involved	Name	Department	Percentage
	Prof S Z Zhang	Physics	100
Course Objectives	This course covers a broad range of topics in physics that are of immediate research interest for graduate students. Topics include most recent advances in both theoretical and experimental physics, including modern quantum many-body physics, quantum information and novel materials.		
Course Contents & Topics	Topics covered in this course are mostly of current research interests.		
Course Learning Outcomes (CLO)	<p>On successful completion of this course, students should be able to:</p> <p>CLO 1 discuss the recent advances in related area and its importance;</p> <p>CLO 2 solve the rudimentary problems that underpin the recent progresses;</p> <p>CLO 3 discuss the possible research directions in related areas;</p> <p>CLO 4 understand the context in which the recent advances arises.</p>		
Pre-requisites (and Co-requisites and Impermissible combinations)	Nil		
Offer in 2024 - 2025	Y 2nd sem	Examination	No exam
Course Grade	Pass or Fail		
Grade Descriptors	<p>Pass: Demonstrate thorough mastery at an advanced level of extensive knowledge and skills required for attaining all the course learning outcomes. Show strong analytical and critical abilities and logical thinking, with evidence of original thought, and ability to apply knowledge to a wide range of complex, familiar and unfamiliar situations. Apply highly effective organizational and presentational skills.</p> <p>Fail: Demonstrate little or no evidence of command of knowledge and skills required for attaining the course learning outcomes. Lack of analytical and critical abilities, logical and coherent thinking. Show very little or no ability to apply knowledge to solve problems. Organization and presentational skills are minimally effective or ineffective.</p>		
Course Type	Lecture-based elective course		
Course Teaching & Learning Activities	Activities	Details	No. of Hours
	Lectures		30
	Tutorials		6
	Reading/Self study		80
Assessment Methods and Weighting	Methods	Details	Weighting in final course grade (%)
	Assignments	Continuous assessments may include assignments, final papers, and final quiz.	100

Quota	9999 (9999 if no quota)		
Required/recommended reading and online materials	Lecture notes provided by Course Coordinator Research papers in the related area.		