

PHYS 3022 *Applied Quantum Mechanics*

2018-19 Term 2 (Jan – April 2019)

Course Instructor: Pak Ming Hui

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Office: SC 110

You are welcome to stop by my office for questions any time or make appointment via email

Course webpage:

<http://www.phy.cuhk.edu.hk/course/2018-2019/2/phys3022/index.html>

Lectures/Tutorials:

Tuesdays 9:30am – 11:15am (*Institute of Chinese Studies L1*)

Thursdays 12:30pm – 2:15pm (YC Liang Hall LHC 103)

Exercise Classes:

Monday 1:30pm – 2:15pm (MMW 706)

Wednesday 6:30pm – 7:15pm (MMW 706)

Thursday 5:30pm – 6:15pm (YC Liang Hall LHC G01)

*Exercise Classes are an integral part of the course. **You must arrange your schedule to go to one exercise class session per week.** TA will work out Sample Questions (examples) resemble those in an upcoming*

Problem Set. You will learn more effectively if you try out the sample questions before attending exercise classes.

Assessments:

Problem Sets: 22% Mid-Term Exam: 30% Final Exam: 48%

[*Students must note:* A necessary (but not sufficient) condition for passing - Students must obtain *more than 20% in the written exam parts* (mid-term plus final) to be considered for a possible passing grade]

About Problem Sets:

- Problem Sets are designed to help you think through the course contents, understand the concepts and methods, and practice
- ***Independent work expected***, although you are encourage to discuss with classmates
- Academic Honesty – CUHK has a zero tolerance policy against plagiarism (don't copy homework). See <http://www.cuhk.edu.hk/policy/academichonesty/> for University policy and advices.
- **T+2 Policy:** Assignments should be submitted on or before the due date **T**. Students may submit an assignment no later than 2 days after the due date (thus T+2), but there will be a 20% discount on the score of that assignment.

Teaching Assistants: 3 TA's, each offering 2 consultation hours (CH) per week. They grade your assignments and conduct exercise classes. They welcome questions even beyond CH's.

CHU Kwok Lam: SC315, Mon and Wed 10:30-11:15

michaelchu90@gmail.com

ZHOU Jingren: SC313, Mon 14:30 – 16:15 jrzhou@phy.cuhk.edu.hk

WANG Jiawai: SC315, Thur 14:30-16:15 jwwang@phy.cuhk.edu.hk

[You may also email them for appointments outside their CHs]

See Course Time Table for details.

PHYS3021 Quantum Mechanics I class notes

PHYS3022 Applied Quantum Mechanics is a continuation of PHYS3021 Quantum Mechanics I, with an emphasis on how QM enhanced our understanding in different branches of physics, including atomic, molecular, nuclear, and solid state physics. We often make use of concepts and techniques covered in PHYS3021. Class notes of PHYS3021 in Fall 2018 are posted in course webpage for your reference.

The class notes of PHYS3021 in Fall 2017 can be found at

<http://www.phy.cuhk.edu.hk/~pmhui/course/phys3021/>

Mathematics Survival

For quick review on mathematical techniques previously covered in Year 1 courses, check out <http://www.phy.cuhk.edu.hk/elearning/maths.html>