

Course: PSCD50H3F, Advanced Topics in Quantum Mechanics

Instructor: Prof. Artur F. Izmaylov (artur.izmaylov@utoronto.ca)

Lectures: IC320, Wednesday 15:00–17:00

Office Hours: EV356, Wednesday 10:30-12:00

Recommended Texts: 1) D. J. Tannor, Introduction to Quantum Mechanics: A Time-Dependent Perspective; 2) L. D. Landau, E. M. Lifshitz, Quantum Mechanics, Vol 3; 3) D. J. Griffiths, Introduction to Quantum Mechanics; 4) A. Messiah, Quantum Mechanics, vol 1 & 2.

Marking Scheme: Home works 20%, Midterm Exam 35%, Final Exam 45%. **To pass this course** you need to pass either the midterm test or the final exam, and to receive a final grade of 50+.

Course Description: This course provides exposure to a variety of theoretical concepts and practical methods for treating various problems in quantum mechanics. The list of topics is as follows.

- 1) Review of the basic postulates: Schrodinger equations (time-dependent / independent), superposition principle, uncertainty relation, measurements, operators, Dirac notation

by the last day of the exam period. Check the UTSC Calendar for instructions and deadlines.

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both meets the needs of students and preserves the essential academic requirements of the University's courses and programs.

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