

# PHYS 457. HONOURS QUANTUM PHYSICS 2.

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Credits: 3

Offered by: Physics (Faculty of Science)

Terms offered: Winter 2026

View offerings for Winter 2026 in Visual Schedule Builder.

## Description

Angular momentum and spin operators. Operator methods in quantum mechanics. Coupling of spin and angular momenta. Variational principles and elements of time dependent perturbation theory (the Golden Rule). Solution of the Schrodinger equation in three dimensions. Applications to the hydrogen and helium atoms and to simple problems in atomic and molecular physics.

- Winter
- 3 hours lectures
- Prerequisite: PHYS 357
- Restriction: Honours students or permission of instructor
- Restriction: Not open to students who have taken PHYS 346

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