

## The Department of Mathematics

2024–25–B term

**Course Name** Quantum Theory 1

**Course Number** 203.1.3141

**Course web page**

<https://www.math.bgu.ac.il/en/teaching/spring2025/courses/quantum-theory-1>

**Office Hours** <https://www.math.bgu.ac.il/en/teaching/hours>

### **Abstract**

### **Requirements and grading<sup>1</sup>**

### **Course topics**

Photoelectric effect, Frank-Hertz experiment, Compton effect, Two-slit experiment, Particle-wave duality, Bohr model, Periodic table Schrodinger eq, Operators, Harmonic oscillator, Stepwise potentials, Quantum mechanics in Hilbert space, Commutator, Central forces, Angular momentum, Hydrogen atom, Magnetic field and spin

---

<sup>1</sup>Information may change during the first two weeks of the term. Please consult the webpage for updates