PHYS 3022 Applied Quantum Mechanics

Learning Outcomes

1.	To acquire basic concepts in quantum mechanics and apply them to study atomic physics, molecular physics, nuclear physics, and other selected topics.
2.	To acquire analytic and approximation methods and to apply them to solve problems in quantum physics and analyze results
3.	To manipulate precise and intricate concepts to construct arguments
4.	To understand basic concepts, key features, major results, and selected applications of atomic, molecular, and nuclear physics, and to appreciate the common quantum thread behind these topics
5.	To develop an awareness of the impact of quantum physics in the 20^{th} century and years to come
6.	To develop an awareness of what is happening at the frontiers of research and to motivate life-long learning