

Calendar of Topics

MONDAY	WEDNESDAY	FRIDAY
1/14 THIS CALENDAR IS SUBJECT TO CHANGE!	1/17 7.1 - 7.4 Introductions	1/19 7.1 - 7.6 Review Standing waves, Stationary States, Particle in a Box
1/22 7.7 - 7.8, 7.11 The Free Particle, the Non-Rigid Box, and Tunneling	1/24 8.0 - 7.3 2-D Schrödinger Equation	1/26 8.3 2-D Schrödinger Equation
1/29 8.4 2-D Schrödinger Equation	1/31 8.5 3-D Schrödinger Equation Separation of variables	2/2 8.5 - 8.6 Separation of variables & Quantization of Ang. Momentum
2/5 8.6 Spherical Harmonics & Associated Legendre Functions	2/7 8.7 - 8.10 Spherical Harmonics & Associated Legendre Functions	2/9 8.8 - 8.10 Hydrogenic Wave Functions
2/12 8.9 - 8.10 Shells and Hydrogen-Like Atoms	2/14 Ch. 9.1-9.5 Electron Spin, Torque on a Current Loop	2/16 MID-WINTER BREAK
2/19 9.5 - 9.7 The Zeeman & Anomalous Zeeman Effect	2/21 10.1-10.5 Multi-electron Atoms, Pauli Exclusion Principle	2/23 Ch. 8, 9, 10 Catch-Up And Review
2/26 11.1 - 11.3 Radiation by Classical Charges, Transitions	2/28 Ch. 8, 9, 10 Exam 1	3/1 11.6 - 11.9 Spontaneous Emission, Selection Rules
3/4 11.6 - 11.9 Lasers	3/6 15.1 - .5 & TRex 9.1 - 9.2 Intro to Statistical Mechanics & The Boltzmann Distribution	3/8 TRex 9.2 - 9.3 The Boltzmann Velocity Distribution & Heat Capacity
3/11 TRex 9.4 The Boltzmann Velocity Distribution & Heat Capacity	3/13 TRex 9.5 - 9.6 Classical & Quantum Statistics	3/15 TRex 9.7 Fermi-Dirac Statistics
3/18 Vernal Equinox 3/19 11:06 pm ←	3/20 SPRING BREAK	3/22 →
3/25 TRex 9.7 Classical and Fermi-Dirac Electrical Conductivity	3/27 TRex 9.7 Fermi-Dirac Statistics and Heat Capacity	3/29 TRex 3.5 & 9.7 Blackbody Radiation and Bose-Einstein Statistics
4/1 TRex 9 & TZDII Ch. 1 Heat Capacity Revisited	4/3 TRex 3 & 9 & TZDII Ch. 15 Catch-up and Review	4/5 16.1 - 16.23 Properties of the Nucleus
4/8 16.3 - 16.6 The Nuclear Force & Potential	4/10 TRex 3 & 9, TZDII 15 Exam 2	4/12 16.7 Binding Energy,
4/15 16.7 - 16.9 Binding Energy, Nuclear Shell Model, Mass Spectrometer	4/17 17.1 - 17.3 Nuclear Fission & Fusion	4/19 17.1 - 17.3 Nuclear Fission & Fusion
4/22 17.1 - 17.3 Radioactive Decay	4/24 17.1 - 17.3 α & β Decay	4/26 SCHOLARSHIP & SCIENCE FESTIVAL DAY
4/29 17.4 - 17.6 α & β Decay	5/1 17.4 - 17.6 Cosmology in Brief	5/3 Review

Final Exam:

Final Exam: 1:30 pm, Wednesday, May 8, 2024