

**PHYS 2135
Summer 2020
Syllabus**

June 2020			
Tuesday	Wednesday	Thursday	Friday
9 L1: Read 5:1-4 (from vol. 2) Electric Charge, Coulomb's Law, Electric Field, Motion of a Charge in an Electric Field	10 L2: Read 5:5 Electric Field of a Charge Distribution	11 L3: Read 5:6-7, 6:1-3 Electric Field Lines, Electric Dipoles, Electric Flux, Gauss' Law	12 L4: Read 6:3-4 Gauss' Law Calculations, Conductors and Electric Fields
16 L5: Read 7:1-3 Electric Potential, Electric Potential Energy	17 L6: Read 7:3-5 Electric Potentials of Charge Distributions, Equipotentials, Potential Gradient	18 L7: Read 8:1-2 Capacitance, Capacitors in Series and Parallel	19 L8: Read 8:3-5 Energy Stored in Capacitors and Electric Fields, Dielectrics
23 <p style="text-align: center;">Exam I 11:00 am – 12:00 pm Material from lectures 1-7</p>	24 L9: Read 9:1-4 Electric Current, Current Density, Resistance	25 L10: Read 9:5 Emf, Electric Power	26 L11: Read 10:1-3 Resistors in Series and Parallel, Kirchhoff's Rules

July 2020

Tuesday	Wednesday	Thursday	Friday
30 L12: Read 10:4-6 Electrical Instruments, RC Circuits	1 L13: Read 11:1-3 Magnetic Fields and Flux, Motion of Charged Particle, Gauss' Law for Magnetism	2 L14: Read 11:4-7 Magnetic Forces on Currents, Magnetic Torque	3 <p align="center">Holiday No Class</p>
7 <p align="center">Exam II 11:00 am – 12:00 pm Material from lectures 8-14</p>	8 L15: Read 12:1-3 Magnetic Field of a Current, Biot-Savart Law, Magnetic Field of Wires, Magnetic Force between Conductors	9 L16: Read 12:3-6 Magnetic Field of Current Loop, Ampere's Law, Solenoids, Toroids	10 L17: Read 13:1-5 Faraday's Law, Induction, Lenz's Law, Generators, Motional emf
14 L18: Read 13:6-7 Induced Electric Field, Eddy Currents, Displacement Current	15 L19: Read 16:1-5 Electromagnetic Waves	16 L20: Read 1:1-5 (from vol. 3) Light: Reflection, Refraction and Dispersion	17 L21: Read 2:1-2 Concave and Convex Mirrors
21 <p align="center">Exam III 11:00 am – 12:00 pm Material from lectures 15-20</p>	22 L22: Read 2:3-8 lenses, Optical Instruments	23 L23a,b: Read 3:1-2 & 4:1-3 Double Slit Interference, Single Slit Interference	24 L23c,d: Read 3:4 & 4:4 Diffraction, Thin Film Interference
28 End Material Review	29 Final Exam Review	30	31 <p align="center">End Material Test Final Exam 10:30 am – 12:30 pm</p>