**Summer General Physics I Schedule**

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| **Week** | **Date** | **Class Topic** | **Lab** | **SGL** |
| 1 | M May 4 | Math Warm Up, Measurement & Units  Coordinates & Speed |  | Monticello - Scaling & Unit Conversions |
| T May 5 | Displacement, Vectors & Velocity  Acceleration in 1-D | Uniform Motion | Forces Pre-Test  Brownian Motion |
| W May 6 | Acceleration & Freefall  2D Motion & Projectiles |  | Projectile Motion, Ruler Drop |
| R May 7 | Projectiles Continued  Circular & Relative Motion | Forces in Equilibrium | Projectile Motion – Cheetah Jump |
| F May 8 | Newton’s 1st and 2nd Laws  Test 1 |  |  |
| 2 | M May 11 | Newton’s 3rd Law  Friction & Centripetal Force | Constant Acceleration | Snowy Roof & Mechanical Advantage - Newton |
| T May 12 | Gravitation, Work & Kinetic Energy | Newton’s Second Law | Springs in Biology |
| W May 13 | Conservation of Energy | Conservation of Energy | Energy Skate Park |
| R May 14 | Power, Momentum & Impulse | Conservation of Momentum | Ballistocardiograph - Momentum |
| F May 15 | Collisions & Glancing Collisions  Rotational Motion  Test 2 |  |  |
| 3 | M May 18 | Torque & Rotational Dynamics | Rotational Motion | Rotational Dynamics |
| T May 19 | Static Equilibrium, Stress & Strain  Pressure | Rotational Equilibrium | Drawbridge |
| W May 20 | Fluids | Simple Harmonic Motion | Blood Flow |
| R May 21 | Temperature & Thermal Kinematics  Heat | Mech Equiv of Heat | Diffusion & Random Walks |
| F May 22 | Calorimetry & Energy Transfer  Test 3 |  |  |
| 4 | M May 25 | **Memorial Day – No Class** |  |  |
| T May 26 | Thermodynamics | Heat Engines | Human Metabolism – First Law of Thermo |
| W May 27 | Vibrations & Oscillations | Resonance | Forces Post-Test  Oscillations |
| R May 28 | Sound |  | E&M Pre-Test  Ultrasound |
| F May 29 | **Final Exam** |  |  |

**Summer General Physics II Schedule**

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| **Week** | **Date** | **Class Topic** | **Lab** | **SGL** |
| 1 | M June 1 | Electric Forces & Fields | Electric Field Mapping | Electric Forces & Fields |
| T June 2 | Gauss’ Law  Electric Potential & Potential Energy | Inverse Square Law for Light | Electric Forces on DNA |
| W June 3 | Capacitors  Ohm’s Law & Resistivity | Ohm’s Law | Adding Capacitors |
| R June 4 | Electric Power & AC Power  Adding Resistors | Kirchhoff’s Laws and Model Mem. | Adding Resistors |
| F June 5 | Kirchhoff’s Rules & RC Circuits  Test 1 |  |  |
| 2 | M June 8 | Magnetism | Time Constants, Resistance & Capacitance | Creating an Electromagnet |
| T June 9 | Magnetism Continued  Faraday’s Law & Generators | Passive spread along an axon | Magnetic Blood Flow Meter |
| W June 10 | Inductance & AC Circuits | Magnetic Forces & Fields | Magnetic Induction |
| R June 11 | Light, Reflection & Refraction | Magnetic Induction | Solar Flux and Prism Refraction |
| F June 12 | Mirrors  Test 2 |  |  |
| 3 | M June 15 | Lenses | Reflection & Refraction of Light | Physics of Vision |
| T June 16 | Optical Instruments | Image formation by Thin Lenses | E&M Post-Test  Microscopes |
| W June 17 | Interference & Diffraction | Interference & Diffraction | Double Slit Pattern |
| R June 18 | Special & General Relativity |  | Relativity |
| F June 19 | Quantum Physics  Test 3 |  |  |
| 4 | M June 22 | Atomic Physics | Atomic and fluorescence Spectra | Bohr-like Models |
| T June 23 | Nuclei & Radioactive Decay | Radioactive Decay | PET Scans |
| W June 24 | Fission, Fusion & Radiation Damage |  | Effects of Radiation in Medicine |
| R June 25 | Particles |  |  |
| F June 26 | **Final Exam** |  |  |