

**WINTHROP UNIVERSITY**  
**PHYS 101 Course Syllabus**  
**Department of Chemistry, Physics, Geology and the Environment**

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Day of the week	Date	Chapters	Topics	Assignments
Tuesday	March 4	Chap.1	Energy, Scientific Method, Feynman on Scientific Method, Scope of Physics, and Measurement.	
Thursday	March 6	Chap.2	Speed, Velocity, Acceleration, Graphing Motion: Position VS. Time, Velocity VS. Time, and Kinematic Equations.	<b>Quiz 1</b>
Tuesday	March 11	Chap.3	Acceleration due to gravity, Falling Objects: Aristotle VS. Galileo, Reaction Time, and Projectile	
Thursday	March 13	Chap.4	History: Aristotle, Galileo, & Newton; Newton's Laws of motion, Mass VS. Weight, and Free-Body diagram.	<b>Quiz 2</b>
Tuesday	March 25	<b>Exam 1</b>	Chapters 1-4	
Thursday	March 27	Chap.5	Circular Motion: Centripetal Force, Planetary Motion: Kepler's laws & Newton's law of universal gravitation.	<b>No Quiz</b>
Tuesday	April 1	Chap.6	Work, Power, Kinetic Energy, Potential Energy: Gravitational & Elastic, Conservation of Energy, and Energy Transformations. Horsepower.	
Thursday	April 3	Chap.7	Momentum, Impulse, Conservation of Momentum, and Collisions.	<b>Quiz 3</b>
Tuesday	April 8	Chap. 8	Rotational Motion: Torque, Rotational Inertia, Center of Mass, Angular Momentum, & Conservation	
Thursday	April 10	<b>Exam 2</b>	Chapters 5-8	
Tuesday	April 15	Chap. 10	Temperature, Heat, Specific Heat, Calorimetry, Methods of heat transfer, Gas Laws, and Heat Engines	
Thursday	April 17	Chap.12	Electric Charge, Conductors & Insulators, Coulomb's law, Electric field, and Electric potential.	<b>Quiz 4</b>
Tuesday	April 22	<b>Exam 3</b>	Chapters 10-12	
Thursday	April 24	Chap.13	Electric Current, Resistance, Ohm's law, Electric circuits: Series & Parallel, Class evaluations, Electric power & energy, DC vs.AC, Household circuits, and Cost of Electricity.	
<b>Thursday</b>	<b>April 30-11:30 am</b>		<b>Final exam</b>	