Honors Lab Physics
Mid-Term Exam Study Guide
2012-2013
(35 Multiple Choice Questions)

Topics	Questions	Chapter(s) [Hecht]
Introduction to Physics • Scientific Method • Graphing • Precision, Accuracy, and Significant Figures	5	1
Kinematics in One Dimension • Scalar Quantity • Vector Quantity • Displacement • Speed • Velocity • Acceleration • Motion Graphs • Free-Fall Motion	5	2,3
Kinematics in Two Dimensions • Vector Diagrams • Vector Addition and Subtraction • Projectile Motion • Relative Motion	5	2,3
Forces • Force Diagrams • Free-Body Diagrams • Normal Force • Frictional Force • Applied Force • Gravitational Force	5	4
Newton's Three Laws of Motion • Inertia • Acceleration, Mass, and Force • Action-Reaction Pairs	5	4
Circular Motion • Tangential Speed • Centripetal Force and Acceleration • Newton's Law of Universal Gravitation • Planetary Motion	5	5
Conservation of Energy • Work, Force, and Displacement • Potential Energy • Kinetic Energy • Work-Kinetic Energy Theorem • Law of Conservation of Energy	5	6