

Physics 2211: *Matter and Interactions*

Chapter 5 Standards

1. I can draw free body diagrams for a system, using our notation conventions.
2. I can resolve vector forces into components.
3. I can calculate the forces and tensions on a system in static equilibrium.
4. I can distinguish between a system momentarily at rest and a system undergoing uniform motion.
5. I understand how the parallel and perpendicular components of the net force affect an object's motion.
6. I can apply the derivative form of the momentum principle to curving motion with parallel and perpendicular components.
7. I can draw a vector to represent an object's rate of change of momentum.
8. I can identify the directions & causes of forces as our body perceives them.
9. I can write a VPython program that shows an object moving in an orbit and uses vectors to display the velocity, momentum, and/or force components perpendicular and parallel to the direction of motion.