

# Some of the topics for the midterm, this is not the entire list of what was covered during the first semester. Any topic we covered in class could be included on the midterm

Vectors...

Displacement, distance, velocity, speed and acceleration: know the concept and how to use equations

1D and 2D motion....including moving up and down

Forces

Using free body diagrams and friction

Gravitational force equation

How do calc gravity if you know mass and radius

Hookes law

Work, KE, PE and PE springs. Include conservation of energy including springs

POWER ( know concepts and all formulas)

Centripetal motion . know 3 equations

Keplers 3<sup>rd</sup> law

Period squared/ radius cubed

Orbital and escape velocity equations