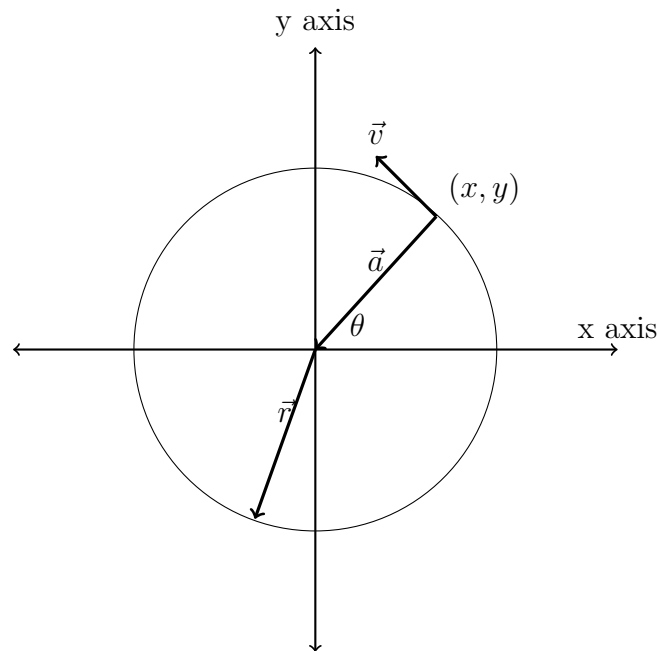


# University Physics 1A

Alvin Lin

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## Uniform Circular Motion



$$a = \frac{v^2}{r}$$
$$\vec{F}_{net} = m\vec{a}$$

For uniform circular motion:

$$F_{centripetal} = F_{net \ radial} = m \frac{v^2}{r}$$

where  $F_{net \ radial}$  is the net force on the object towards the center of the circle.

## Spring Force

Hooke's Law:

$$F_{by\ spring} = -kx$$

where  $k$  is the spring constant and  $x$  is the distance that it has been stretched or compressed from rest. Any spring that follows this law is called a Hooke's Law spring.

## Reminders and Homework

Complete the homework on TheExpertTA and WebAssign.

**Remember to bring the Activities Manual.**

You can find all my notes at <http://omgimanerd.tech/notes>. If you have any questions, comments, or concerns, please contact me at [alvin@omgimanerd.tech](mailto:alvin@omgimanerd.tech)