

PHYSICS 160 READING

ASSIGNMENT FOR FEBRUARY 15

SECTIONS 4.1 - 3.3

4.1 - Force and Interaction

- Chapter 4 begins our study of dynamics - Why objects move.
- Force - push or pull that cause motion.
- Two type of forces - contact and long range.
- Newton (N) - S.I. unit of force.
- Superposition - The net result of two or more forces is given by vector addition. (We do a *lot* of vector addition in this chapter and the next.

4.2 - Newton's First Law

- Newton's first law tells us what happens when the net force on an object is zero. It keeps doing whatever it was already doing.
- Inertia - The property of matter that if at rest to stay at rest, but if already in motion to stay in motion.
- Read the part about inertial frames of reference in order to get a better understanding of what's underlying the assumptions I'll make in class (without being explicit about it in lecture).