

Chapter C1: Introduction to Interactions

Physics I

College of the Atlantic

A few themes for the course, especially in the beginning. We will strive to:

1. Distinguish between physics and mathematics.
2. Distinguish between definitions and other types of statements.
3. Be thoughtful about units and use them to help us solve problems.
4. Use mathematical notation carefully and precisely.

C1.4 Introduction to Mechanics

There are some physical statements in this chapter that have very far-reaching consequences:

1. An interaction in a physical relationship between two objects that (in the absence of other interactions) changes the motion of each.
2. Newton's first law: An object that does not interact with something else moves with a constant speed in a fixed direction.

C1.6 Macroscopic Interactions

Fig. C1.5 summarizes this section nicely.

C1.9 Physics Skills: Units

The examples on p. 19 may be useful. You should get in the habit of doing unit conversions using the style of Eq. (C1.2).