



Understanding Motion and Force examines how and why rolling and falling motions occur and explores how to analyze the forces that cause these motions.

Course Objectives

- Examine the relationship between rolling and falling motions
- Explore the basic concepts of force
- Identify the causes of floating and sinking motions
- Examine how making and testing predictions can foster learning

Course Syllabus

Session 1: Investigating Motion

Make predictions and observe examples of rolling and falling motion. Teaching and learning strategies focus on making and testing predictions.

Session 2: Analyzing Forces

Learn to identify some of the major forces acting on moving objects, including gravity, friction, the normal force, and impulsive forces. Teaching and learning strategies focus on observation and experimentation.

Additional Course Information

15 contact hours

2nd in a series of 3 online courses (elementary / physical science)

Other courses in the series:

1st course: **Motion and Forces in Your World**[†]

3rd course: **Properties and Structures**

A full survey course (45 contact hours), **Teaching Elementary Physical Science**, is also available.

[†] recommended before taking this course

We recommend 2-session courses be taken in order. If this is not possible, it's important to have a basic knowledge of the content and methodology described in the preceding courses.

For information about all Teachers' Domain Professional Development courses, visit

www.TeachersDomain.org/courseinfo



Exemplary practice video in online course