BAKER COLLEGE
STUDENT LEARNING OUTCOMES

PSY1210 Physics Concepts
1 Semester Credit Hour

Student Learning Outcomes and Enabling Objectives

1. Analyze dimensions of matter.
    a. Explain the International System of Units (SI).
    b. Convert between units of measurement.
    c. Explain the use of significant figures in scientific calculations

2. Summarize the conservation of Energy
    a. Explain one- and two-dimensional kinematics
    b. Differentiate between Newton's Laws
    c. Describe the six classifications of energy.
    d. Discuss fluids and Bernoulli's effect.

3. Differentiate between electromagnetic or mechanical waves
    a. Compare the origin and properties of waves.
    b. Distinguish vibrations from waves.
    c. Compare and contrast sound and Doppler Effect.
    d. Explain the relationship between wavelength, frequency, period, and wave velocity.
    e. Describe wave amplitude, power, and intensity.

Big Ideas and Essential Questions

Big Ideas

- Dimensional analysis
- Energy Laws
- Properties of waves

Essential Questions

1. How can measurements be taken to ensure the least amount of error?
2. How are energy laws related to physical concepts?
3. Why are waves useful in taking measurements?