SC 240  
Alpha Number

Introduction to Physics  
Course Title

Course Description

Presents the fundamentals of conceptual physics covering measurements, force, motion, energy, matter, heat, thermodynamics and electricity

Course prepared by:  
Donald Hess  
Jan. 2003

Liberal Arts and Science Department

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<tr>
<td>Lecture</td>
<td>3</td>
<td>16</td>
<td>48</td>
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<td>Laboratory</td>
<td>2.5</td>
<td>16</td>
<td>40</td>
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<tr>
<td>Clinical</td>
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<tr>
<td>Seminar</td>
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Total Credit Hours 4

Purpose of Course:  
Degree Requirement

Degree Elective X
Certification
Developmental
Other

Prerequisite(s)  
Math 090

Signature, Curriculum Committee Chairperson  
6/26/03

Signature, Dean of Instruction  
6/26/03

Signature, President, CMI  
6/3/03

Subsequently Reviewed by  
or Biannual Review by  
Date

Archive?
I. Introduction to Physics

II. Course Objectives

A. General Objectives
   The Student will:
   1. Understand the basic concepts of physics and related problems
   2. Know how to measure forces
   3. Acquire the basic physical concepts of matter, energy, motion, magnetism and electricity

B. Specific Objectives
   Upon completion of this course, the student will be able to:
   1. Perform and convert measurements accurately
   2. Solve problems relating to the fundamentals of force
   3. Describe simple linear motion and vectors, and solve related problems
   4. Determine non-linear motion and solve related problems
   5. Identify forces, torque and the operations of simple machines
   6. Describe the basic physical concepts of matter
   7. Describe the principles of heat and thermodynamics
   8. Describe the basic principles of magnetism and electricity

III. Course Content

1. Scientific Method
2. Measurements
3. Mechanics
   a. Motion
   b. Momentum
   c. Energy
   d. Gravity
4. Properties of matter
5. Heat and thermodynamics
6. Electricity and magnetism

IV. Text(s)


V. Current References and Other Supplementary Learning Resources

   None

VI. Methods of Instruction

   Lectures, discussions, videos, group work, individual work, laboratory experiments, field trips, demonstrations and computer aided audio visual aids
VII. Equipment and Materials

Computer and LCD Projector
VHS and Television

VIII. Suggested Methods of Evaluation

Quizzes, homework, lab reports, midterm and final
Letter grades will be assigned per CMI Grading System.
## Course History Summary

**Course Number:** SC 240  
**Introduction to Physics (4)**

<table>
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