



**School of Arts & Science  
PHYSICS DEPARTMENT**

**PHYS 060-002  
Introductory Physics  
2007W**

## COURSE OUTLINE

The Approved Course Description is available on the web @ \_\_\_\_\_

Ω Please note: this outline will be electronically stored for five (5) years only.  
It is strongly recommended students keep this outline for your records.

### 1. Instructor Information

(a)	Instructor:	Ed Nelson		
(b)	Office Hours:	MTThF 11:30 – 12:20 W 12:30 – 1:20		
(c)	Location:	F314D		
(d)	Phone:	370-3515	Alternative Phone:	
(e)	Email:	<a href="mailto:nelson@camosun.bc.ca">nelson@camosun.bc.ca</a>		
(f)	Website:			

### 2. Intended Learning Outcomes

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Upon completion of this course the student will be able to:

1. Demonstrate skill in the use of S.I. base and derived units.
2. Demonstrate skill in drawing graphs (by hand), determining slopes of linear graphs, linearization of non-linear data, and writing an equation to represent a linear graph.
3. Solve technical problems involving one-dimensional kinematics for a single particle with constant acceleration.
4. Solve technical problems involving the dynamics of a single particle in one dimension (force, weight, Newton's Laws of Motion).
5. Solve technical problems involving kinetic energy, gravitational potential energy, elastic potential energy, conservation of mechanical energy, and mechanical power.
6. Solve technical problems involving simple DC electric circuits, Ohm's Law, electric power, and resistors in series and parallel combination.
7. Solve technical problems involving nuclear energy (mass-energy equivalence, binding energy).

### 3. Required Materials

See Below

(a)	Texts	
(b)	Other	

#### 4. Course Content and Schedule

(Can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

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#### 5. Basis of Student Assessment (Weighting)

(Should be linked directly to learning outcomes.)

See Below

(a)	Assignments	
(b)	Quizzes	
(c)	Exams	
(d)	Other (eg, Attendance, Project, Group Work)	

#### 6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

##### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	A		8
85-89	A-		7
80-84	B+		6
75-79	B		5
70-74	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

##### Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at [camosun.ca](http://camosun.ca) or information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.

<b>CW</b>	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.
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## 7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at [camosun.ca](http://camosun.ca).

### STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.

### ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED

## Physics Department Camosun College

### ***PHYS 060 Introduction to Physics***

This is a "first course" to introduce students to the nature of physics. Physics 060 is also recommended for students who took Physics 11 several years ago. We will study various topics, beginning with measurement, graphical analysis, 1-D kinematics, 1-D dynamics, energy, heat, electricity and nuclear energy.

For many students, the study of physics often becomes a bewildering array of mathematical expressions or "recipes", which they attempt to memorise. At times, it will appear that we do nothing other than manipulate mathematical symbols and solve algebraic expressions, but keep in mind that physics is much more than this. The beauty of physics lies in the fact that it rests on a relatively small number of fundamental principles, which we can exploit in numerous real-life situations. Success in this course will be achieved by doing lots of problems on your own, or with your friends in groups.

*The three key words to Physics are: problems, problems, problems!*

**Instructor:** Ed Nelson (Chair, Department of Physics)

**Office:** Fisher 314D      **Phone:** (370) 3515   **E-mail:** nelson@camosun.bc.ca

**Office Hours:** Office hours are posted outside my office. Alternatively, you can make an appointment by leaving a written message, phone message, or email message. However, feel free to drop by any time.

**Required Materials for this course:**

1. Text & Reference: PHYSICS 060/150 Course Materials (Camosun)
2. PHYS 060 Course Outline (provided)
3. PHYS 060 Laboratory Manual
4. Laboratory Report Book [a simple coil-ring notebook with graph paper is preferred].
5. Scientific Calculator
6. Graph Paper, graphing & drawing instruments (rulers, protractor, triangles, etc.)

**Recommended:**

PHYS 060 Study Guide and Workbook

**Evaluation:**

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|-----------------------|------------|
| 1. FINAL EXAM         | 50%        |
| 2. Midterm exams      | 30%        |
| 3. Quizzes            | 5%         |
| 4. Homework           | 5%         |
| 5. Laboratory reports | <u>10%</u> |
|                       | 100%       |

**\* NOTE:** *A passing mark in the laboratory reports is required to obtain credit in PHYS 060. This means all lab reports must be completed and handed in on time, and with a passing grade.*