



**School of Arts & Science  
PHYSICS DEPARTMENT**  
**PHYS 105-01**  
**General College Physics 2**  
**2008 W**

## **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:   | John Pratt   |                    |            |
| (b) | Office Hours: | M.,T.,W., 10:30 – 11:20 ; Th., 8:30 – 9:20 ; F., 3:20 – 4:20 |                    |            |
| (c) | Location:     | F 346-B  |                    |            |
| (d) | Phone:        | 370 - 3516   | Alternative Phone: | 370 - 3511 |
| (e) | Email:        | prattj@camosun.bc.ca   |                    |            |
| (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. Define and describe the following properties of waves: period, frequency, wave speed, and amplitude. State the principal of superposition and understand the properties of waves undergoing constructive and destructive interference.
2. State the conditions for standing waves and identify nodes and anti-nodes. Solve problems of vibrating strings and air columns, including fundamental nodes and harmonics.
3. Solve technical problems involving the behaviour of light at an interface between media (laws of reflection, refraction, dispersion).
4. Solve technical problems involving geometric optics (lenses, mirrors, simple optic devices).
5. Solve technical problems involving the electrostatic force, the electric field and potential.
6. Solve technical problems associated with simple DC circuits and networks of batteries and resistors in series and parallel circuits, Ohm's Law and electric power.
7. Solve technical problems involving magnetic fields due to current-carrying wires, magnetic forces between wires and on charged particles, and the practical application of magnetism.

### **3. Required Materials**

- (a) Texts Giancoli,"Physics", 6. Edition

(b) Other 104/5 Lab. Manual

#### 4. Course Content and Schedule

M.,T.,W.,Th., at 9:30 – 10:20 : F. 9:30 – 11:20

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

(Should be linked directly to learning outcomes.)

(a) Assignments

(b) Quizzes

(c) Exams Midterm examinations(2) : 30% ; Final exam. 50%

(d) Other (e.g., Attendance, Project, Group Work) Laboratory work 20%

#### 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 |
|------------|-------|---|-------------------------|
| 90-100     | A+    |   | 9                       |
| 85-89      | A     |   | 8                       |
| 80-84      | A-    |   | 7                       |
| 77-79      | B+    |   | 6                       |
| 73-76      | B     |   | 5                       |
| 70-72      | B-    |   | 4                       |
| 65-69      | C+    |   | 3                       |
| 60-64      | C     |   | 2                       |
| 50-59      | D     | Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite. | 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 E-1.5 at [camosun.ca](http://camosun.ca) for 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. |

|           |  |
|-----------|--|
| <b>IP</b> | <i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. <i>(For these courses a final grade will be assigned to either the 3<sup>rd</sup> course attempt or at the point of course completion.)</i> |
| <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.  |

**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**