



COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/phys.html>

Ω Please note: the College electronically stores this outline for five (5) years only.
It is **strongly recommended** you keep a copy of this outline with your academic records.
You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Stephanie LaForest
(b)	Office Hours:	Monday- Friday 12:30-1:30 pm
(c)	Location:	F346 C
(d)	Phone:	250-370-3513
(e)	Email:	LaforestS@camosun.bc.ca
(f)	Website:	D2L

2. Intended Learning Outcomes

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.
8. Assemble experimental apparatus using written instructions.
9. Observe, record, organize and display data in tables, graphs or charts.
10. Analyze linear graphs (determine area, slope, intercept, etc.).
11. Observe and record sources of error and estimate the range of uncertainty in results.
12. Interpret meaning of experimental results in the context of the experimental objectives.
13. Write scientific reports in an acceptable, traditional format.

3. Required Materials

- (a) Texts Physics, Principles with Applications, 7th edition, Douglas C. Giancoli
- (b) Other Physics 105 Laboratory Manual

4. Course Content and Schedule

Class Times:	Monday	1:30 – 3:20 pm	F322
	Tuesday	1:30 - 2:20 pm	F316
	Wednesday	1:30- 3:20 pm	F322
	Thursday	1:30 – 3:20 pm	F316
	Friday	1:30 – 3:20 pm	F322
Lab Time:	Tuesday	2:20 – 4:20 pm	F322
	Thursday	2:20 – 4:20 pm	F322

5. Basis of Student Assessment (Weighting)

The student must be successful (ie. obtain a grade of at least 50%) in both the theory and laboratory components of the course in order to pass. The percentages used for the final grading are:

Tests	30%
Homework	5%
Lab Work	15%
Final Exam (3 hours)	50%

COURSE SPECIFIC POLICIES

1. Homework problems will be assigned from the textbook. They will be due each week and will be marked for completeness.
2. Labs for a particular week will be due one week following the lab. Each student is allowed one “dropped” or “missed” lab.
3. You must be present to collect your own data during a lab (as will be verified with a sign in sheet). Labs completed using others’ data will not be accepted.
4. Any outstanding homework or labs must be submitted prior to the last day of classes, and will be graded according to the late policy outlined by the instructor.

PHYSICS DEPARTMENT POLICIES REGARDING TESTING:

1. The final exam will cover the entire course and will be 3 hours long. As stated in the current college calendar on page 39, “students are expected to write tests and final exams at the scheduled time and place.” Exceptions will only be considered due to emergency circumstances as outlined in the calendar. Holidays or scheduled flights are not considered to be emergencies.
2. Students must write quizzes, tests, midterm tests, etc., on the date and time assigned by the instructor. Missed exams normally receive a zero grade. Instructors are not required to provide make-up tests. At their discretion, instructors may waive a test in exceptional circumstances such as medical issues or a documented illness, if they are notified within 24 hours of the missed test.

PHYSICS DEPARTMENT POLICIES REGARDING LABS:

1. Labs take place in the designated lab period. A lab may be waived or made up at a later time only in the case of documented illness or other extenuating circumstances. In the case that a makeup lab is required, the instructor must be contacted by phone or email within 24 hours of the missed lab.
2. Unless otherwise stated by your instructor late penalties are as follows: For overdue labs (or assignments), a late penalty of 1 mark per day (10%) will be assessed for the first five days following the due date. After this date a complete lab report is still required and earns a maximum mark of 50%.
3. At the discretion of the instructor, a student who is repeating this Physics course may apply for lab exemption.
4. Students must obtain an overall grade of 50% or higher in the laboratory component of the course in order to obtain credit for the course.

**6. Grading System
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 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.
IP	<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. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
CW	<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.

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.