CAMOSUN COLLEGE	***School of Arts & Science*** ***MATHEMATICS DEPARTMENT*** **MATH 175** **Mathematics for Electronics 5** **2009 Q3**

COURSE OUTLINE

1. Instructor Information

(a)	Instructor:	Gilles Cazelais		
(b)	Office Hours:	http://pacificcoast.net/~cazelais/schedule.html		
(c)	Location:	CBA 158		
(d)	Phone:	370-4495	Alternative Phone:	
(e)	Email:	Cazelais@camosun.bc.ca		
(f)	Website:	http://pacificcoast.net/~cazelais/175.html		

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. Solve applied problems in physics and engineering using the basic tools of matrix algebra and differential calculus (including vector and matrix operations, determinants, the deriviates of exponential, logarithmic, and trigonometric functions).

3. Required Materials

Allyn J. Washington, *Basic Technical Mathematics with Calculus*, 8th Edition

4. Course Content and Schedule

http://pacificcoast.net/~cazelais/schedule.html

5. Basis of Student Assessment (Weighting)

- Three term tests: 50%
- Comprehensive final exam: 50%

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** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	*Incomplete*: 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	*In progress*: 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 3rd course attempt or at the point of course completion.)*
CW	*Compulsory Withdrawal:* 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.

1. Methods of Integration
· The General Power Formula (28.1)
· The Basic Logarithmic Form (28.2)
· The Exponential Form (28.3)
· Basic Trigonometric Forms (28.4)
· Other Trigonometric Forms (28.5)
· Inverse Trigonometric Forms (28.6)
· Integration by Parts (28.7)
· Integration by Trigonometric Substitution (28.8)
· Integration by Partial Fractions: Nonrepeated Linear Factors (28.9)
· Integration by Partial Fractions: Other Cases (28.10)

2. Expansion of Functions in Series
· Infinite Series (29.1)
· Maclaurin Series (29.2)
· Certain Operations with Series (29.3)
· Computation by Use of Series (29.4)
· Taylor Series (29.5)

3. Differential Equations
· Solutions of Differential Equations (30.1)
· Separations of Variables (30.2)
· The Linear Differential Equations of First Order (30.4)
· Elementary Applications (30.5)
· Higher-Order Homogeneous Equations (30.6)
· Auxiliary Equations with Repeated or Complex Roots (30.7)
· Solutions of Nonhomogeneous Equations (30.8)
· Applications of Second-Order Equations (30.9)

4. Laplace Transforms
· Laplace Transforms (30.10)
· Solving Differential Equations by Laplace Transforms (30.11)
· Step and Impulse Functions
· Convolution

5. Fourier Series
· Introduction to Fourier Series (29.6)
· More about Fourier Series (29.7)