CAMOSUN COLLEGE	**School of Arts & Science** **MATHEMATICS DEPARTMENT** **MATH 108** **Applied Calculus** **Quarter or Semester/Year**

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/math.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:	Chris Odgers	
(b)	Office Hours:	1030-1130, daily	
(c)	Location:	E-262	
(d)	Phone:	3500	Alternative Phone:
(e)	Email:	odgers@camosun.bc.ca	
(f)	Website:		

2. Intended Learning Outcomes
(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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

1. Find the limit of elementary functions as the independent variable approaches some finite value or approaches infinity.
2. Find the derivative of simple functions using the definition of the derivative.
3. Find the derivative of functions (polynomial, trigonometric, logarithmic and exponential functions) using the product, quotient and chain rule.
4. Find the derivative using implicit differentiation.
5. Solve problems involving rates of change.
6. Find relative and absolute extrema of functions.
7. Sketch graphs of functions identifying such features as relative extrema, intervals where the function is increasing and decreasing, points of inflection, intervals where the function is concave up and concave down, and asymptotes.
8. Solve problems that involve maximizing or minimizing some variable associated with the problem.
9. Find the approximate area under a curve using the area of a set of approximating rectangles.
10. Evaluate a definite and an indefinite integral of polynomial, trigonometric, logarithmic and exponential functions using the Fundamental theorem of Calculus.
11. Evaluate integrals using the method of substitution.
12. Use integration to find the area between two curves.
13. Evaluate a definite and indefinite integral by the method of integration by parts.
14. Solve elementary differential equations using the method of separation of variables.
15. Solve problems using differential and integral calculus that involve applications from business and/or biological sciences.

3. Required Materials

(a) Text: Calculus with Applications, Lial, Greenwell and Richie, 9th edition.

(b) Other

4. Course Content and Schedule
(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

5. Basis of Student Assessment (Weighting)

Course Content: Chapters 1 - 7, 8.1, 10.1, 12

Grading: 4 quizzes, assignments   50%
                 Final Exam   50%
                 or
                 If your term work **is complete** and **satisfactory**, and your mark on the
                 final is higher, the final will count for 100% of your grade. This policy is
                 prorated.

Note: *No electronic devices of any sort (e.g. cell phones, ipods, translators) other than
            the Sharp EL531 W are allowed on tests.* ***Quizzes are on Sept.29, Oct. 20, Nov. 10, Dec. 1.
            Your final could be as late as Dec. 21, 2010.***

If you are going to miss a quiz, please familiarize yourself with the missed quiz
policy below.

6. Grading System
*(No changes are to be made to this section unless the Approved Course Description has been forwarded
through the Education Council of Camosun College 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

HAVING TROUBLE? NEED HELP? Office hours are 10:30-11:30 every day. Also, free tutoring is available in Ewing 224, the hours are posted on the door.
 Most quiz questions come from the assigned questions and class examples.
If a quiz is short (for instance, if 20% of the class is finished after 40 minutes) bonus questions are usually available on request from me. Anyone can ask for them, if it's not too late. They are usually slightly harder than regular test questions. There is no penalty for not doing them, or for getting them wrong. Additional marks can be earned on an assignment or quiz by doing unusually thorough or original work. If you want to use methods other than those used in class, please ask first.

Assignments due on a given day are, unless otherwise noted, due anytime that day. They can be submitted to me or at my office. Late assignments are usually not accepted without a good reason and prior agreement. Students who miss class are responsible for making up the missed material on their own time.

Missed Quiz/Rewrite Policy

Students are expected to make every reasonable effort to write the quiz at the scheduled time. **A missed quiz usually counts as a 0,** so if for any reason it appears that you may miss a quiz:

- **Before the quiz**, talk with the instructor about missing the quiz, unless an unforeseen emergency makes this impossible, in which case leave a comprehensive message. Please do this as soon as possible.
 Assuming that you qualify for a deferred quiz (for instance, medical or compassionate leave), **you will be expected to write the quiz before the next class**; the quiz is usually left for the student in the math lab. If this isn't possible, make alternate arrangements with the instructor well before the next class after the quiz, unless an unforeseen emergency makes this impossible too. In that case, leave a comprehensive message.

Please inquire if you have any questions or concerns about your particular situation.

STUDENT CONDUCT POLICY

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED