

# Math 100 – Winter 2005

## Camosun College

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Class times: 12:30 – 1:20 daily in Y227

Office hours: Mon – Fri 10:30 – 11:10; Tues & Thurs 1:30 – 2:00  
You are welcome to try me at other times. If my office door is open, I'll be happy to help. Please, just one or two questions per visit. Come often!

Math Room: Ewing 224 (370 - 3503)  
This is a drop-in centre where you can work on your math homework and get free help from the math tutor.

Textbook: Calculus of a Single Variable, 7<sup>th</sup> ed., Larson et al. (Solution guide included.)

References: The textbook, student solution manual and some videotapes are on reserve in the library.

Calculator: Non-graphing non-programmable calculator for tests/final. The first test will be done without a calculator to check your basic trig and number skills.

Prerequisite for Math 100: Recent B in either MATH 105 or 115 or Math 12. If you have not taken math for a couple of years, then please come to my office ASAP and we can discuss your math background to see if this is the right course for you.

Prerequisite for **Math 101**: Recent B- in Math 100 is recommended. However, you may enter Math 101 with a grade of C in Math 100.

### **Out-of-Class Workload:**

1+ hours every day. Try not to fall behind; Math 100 is not a course that you can put on the “back burner”. On your timetable, schedule time for your math homework every day.

### **Tips for Success:**

1. Attend every class and work hard in class. Please ask questions if you don't understand something.
2. Do your homework every day. Unfortunately, math is not a spectator sport. It takes a lot of hard work, practice and patience.
3. Work thoughtfully through your homework; don't just try to get it over with as fast as possible. It is best not to have the solution manual open in front of you; consult it only after you have tried a problem a couple of times.
4. Please ask for help before you get behind or frustrated. If you can't get the correct answer, bring me all your attempts so that I can see what you are thinking. Help is also available from your classmates and the math tutor.

Course Objectives: The four very ambitious objectives of the course are:

- To learn where and how calculus can be used to solve problems in science and mathematics. This involves learning the notation, rules, and techniques of calculus and solving applied problems.
- To continue developing your ability to read mathematics.
- To be able to write mathematics correctly and to be able to write about the mathematics you are learning.
- To begin developing your ability to read and write proofs.

Course Content: Math 100 is the first half of first year calculus for mathematics, computer science, physics and chemistry students. Math 108 is a less theoretical and more applied calculus course for biology, business and social science students.

Ch 1: Limits and Their Properties: 1.1 – 1.5  
 Ch 2: Differentiation: 2.1 – 2.6  
 Ch 3: Applications of Differentiation: 3.1 – 3.9 (omit 3.10)  
 Ch 4: Integration: 4.1 – 4.6  
 Ch 5: Logarithmic and Exponential Functions: 5.1 – 5.6

Test Information: The tests are based on your class notes, homework and the review sheets. (There will be a short Maple question on each test.) Please see the pacing schedule for the test dates. I expect that some of you will miss a test due to illness or a family emergency. If there were just one midterm, then I would arrange for a makeup test. However, with so many tests, makeups are just not practical. Instead, please submit a doctor's note or other documentation and I will determine a mark for that test based on how you do on that material on the final exam. Please note that the final exam is timetabled by registration and occurs in week 15 or 16.

Grade Calculation: Best 5 of 6 Term Tests: 50%\*  
 Final Exam: 50%\*

\*To obtain a grade of C or higher in this course, you need to achieve an overall grade of at least 60% AND you must obtain a passing grade (at least 50%) on both your term work and the final exam. The reason that we require a passing term grade is that math that is learned slowly over a period of time is usually retained for longer; information that is crammed in just before a final exam may be quickly forgotten. We also require a passing grade on the final exam since it is a cumulative test that puts all the bits and pieces together.

To obtain a grade of A+ in the course, your term work must be at least 90% and your overall average must be at least 95%.

If you do well on the final exam and you have a passing term grade, then we will weight your exam for 100% (with the A+ exception noted above).

Grade Scale: To obtain a grade of C or higher in the course, please see the comments above.

A+	95 - 100	B+	80 - 84	C+	65 - 69
A	90 - 94	B	75 - 79	C	60 - 64
A-	85 - 89	B-	70 - 74	D	50 - 59
				F	< 50

Good luck and please come for help before you fall behind.