Camosun College
Math 105-001 Winter 2010

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Course Website:	http://sites.google.com/site/peggytilley/

Practice tests and solutions are posted on the website. As well, for every class, there are links to readings, examples and YouTube. If you miss class or want more explanation, these resources may help. Unfortunately I do not have a set of class notes that I can put up. The web material is **optional**; all the required material is presented in class and/or covered in the printed exercise sets that you buy in the bookstore.

Office:	**Ewing 248**
Office hours:	**Mon : 10:00 – 11:30, M,W,Th: 2:00 – 3:00**
Class times:	Mon – Fri 12:30 – 1:50 in Y219

Out-of-class Workload: **1.5 – 2 hr every day** (not 10 hours on Sunday!)
We cover a new section each day. This is an intensive 6 credit course. It's very important to stay on top of the material.

Math Help Centres: **Ewing 224** and **Ewing 342 www.camosun.ca/math-help**
These are drop-in study centres where you can work on your math homework alone or with classmates and get free help from the math tutor.

Required Print Material: Math 105 & 107 Exercise Sets (sold in the bookstore)

References: There is no prescribed textbook since no one book adequately covers all the material. No outside reading is required. However, if you would like a book for a particular topic, there is an assortment of precalculus textbooks in the math room and on reserve in the the library. As well, there are math videos and DVDs in Library Viewing Room which are available on 3 day loan. And, our course website has links to both print and video resources.

Calculator: The **Sharp EL 531** calculator (the current model is designated 531W but older models of the 531 are also permitted) is the required calculator for this and all math courses at the Lansdowne campus. For fairness, it will be the only calculator allowed for tests/exams. The first term test will be done without a calculator. You don't need (and should not use) a calculator for the first 4 weeks of class.

Prerequisite: The minimum recommended prerequisite is a **recent** C+ in either Math 11 or MATH 073. If you have not completed Math 11 within the past 2 years, then you probably want to refresh in either 072/073 or perhaps just 073 (all tuition free courses) this term. Please come and see myself or the chair of the math department for advice as soon as possible.

Comparison of
Math 105 and 107: Math 107 is a lighter version of Math 105. If you need a UT Math 12 level course for environmental technology or applied calculus (Math 108) or a BA degree or a UVic degree in biology, psychology, geography or business, then

Course Objectives:	probably Math 107 is the course for you. I'll be happy to talk with you about your particular plans so that we find the course that is the best match for you. The objectives of this course are: • To strengthen your algebra background. To ensure that you are very comfortable pushing around symbols correctly. • To build up a library of functions that you can graph and manipulate with ease. • To continue developing your ability to read mathematics and to write mathematics correctly. • To begin developing your ability to read and write proofs.
Course Content:	MATH 105 is an algebra and precalculus course. We start with a review of algebra and analytic geometry and then continue with an in depth study of functions, polynomial functions, rational functions, exponential and logarithmic functions, trigonometric functions and their inverses, trigonometric identities and equations. A brief introduction to calculus is sprinkled throughout the course.
Tests:	There are **five** tests based on the homework in the Math 105 & 107 Exercise Sets and also a trigonometry proof quiz. Test dates are shown on the course calendar attached to this outline. A comprehensive final exam is scheduled by registration anytime from April 12 – 17 inclusive. The final exam schedule is posted on Camlink by the end of February.
Missed Tests:	If you miss a test for any reason (illness, family emergency, etc) then the weight for that test (10%) goes on the final exam. Please see the grade calculation below.
Grade Calculation:	(1) Your final grade for the course **cannot be higher than your mark you earn on the trig proof quiz**. For example, if you score 75% on the trig proof quiz, then your maximum possible grade for the course is a B. (The trig proof quiz test just requires that you learn and understand a series of related proofs. Students typically earn grades of over 90% on this quiz.) (2) Your final grade will be automatically calculated three different ways and you will be awarded the highest of these three grades.

Option 1:	All 5 Term Tests	50%
	Final exam	50%
Option 2:	Best 4 of 5 Term Tests	40%
	Final Exam	60%
Option 3:	Best 3 of 5 Term Tests	30%
	Final exam	70%

Grade Scale:

A+	90 - 100	B+	77 - 79	C+	65 - 69
A	85 - 89	B	73 - 76	C	60 - 64
A-	80 - 84	B-	70 - 72	D	50 - 59
F	< 50				

Exit Grade You Need:	If you are heading for Math 100 (calculus for students in mathematics, computing science, physics, chemistry, geology, etc), then you need a **B** in Math 105. For most other math courses and programs, a grade of C in Math 105 is sufficient. Note that many of our college programs and courses require C+ in Math 12 or C in Math 105 or 107 or 115.

Tips for Success

1. Attend every class and get the most out of class time. Don't be afraid to ask and answer questions. Don't worry about answering a question wrong – wrong answers give me a chance to correct misconceptions. I often give you a bit of time to start or finish a question before we write up the solution on the board. Please use that time to work on the problem or to get help from, or give help to, the person beside you. Please turn off and put away your cell phone. Checking and sending messages is not a smart (or polite) use of class time. Copying notes for a class that you missed rather than working hard on the new material is also not the best (or polite) use of class time.

2. Do your homework every day. Math is not a spectator sport; understanding what we do in class is only the first step. Work through lots of exercises and really think about the ideas; don't just try to get your homework over with! On your timetable, schedule time each day for your math homework; it is really important to establish a routine. You can't put this course on the back burner and hope to cram it in at the end.

3. Work with a classmate (a study buddy) some of the time. It's fun and you will see whether you really understand something when you try to explain it to someone else.

4. Please ask for help before you fall behind or become frustrated. If you can't get the correct answer, bring me your work so that I can see what you are thinking. I like to spend time explaining what is going wrong as well as nudging you towards a correct answer. Don't save up your questions until you have a long list; I find I can be more effective working with you on just one or two ideas at a time. Be a frequent user of the math room and my office hours. We are here to help.

5. Keep working, stay positive and do the best that you can given all the other demands in your life.

Good luck