## Mathematics 115

Precalculus **Spring**, 2004 Instructor: George Ballinger Office: Ewing 256 E-mail: ballinger@camosun.bc.ca Web Site: www.camosun.bc.ca/~ballinge/ **Telephone:** 370-3116 Office Hours: 1:30-2:20pm, Monday-Friday Lecture Times: 2:30-4:20pm, Monday-Friday Classroom: Wilna Thomas 102 Important Dates: May 3 First day of classes May 10 Tuition fees due date May 24 Victoria Day (no classes) June 2 Withdrawal date deadline June 18 Last day of classes June 21-23 Final Exam Period (specific date, time, and location TBA in May) **Calendar Description:** Topics: transformations, conic sections, polynomial, rational, exponential and logarithmic functions, polynomial equations, radical functions and equations, circular trigonometric functions and their inverses, and an introduction to calculus. [4 Credits] (Source: Camosun College 2004-2005 Calendar) Prerequisites: B- in MATH 063 or a B in Math 11 or a C in Math 12 or MATH 173 or assessment. Exit Grade: A grade of B (75%) or better in Math 115 is necessary to continue into Math 100 Calculus 1 (for math and science students). A grade of C (60%) or better in Math 115 is necessary to continue into Math 108 Applied Calculus (for business, biology, and social science students). Required Textbooks: R. Larson and R.P. Hostetler, Precalculus, 6th Edition, Houghton-Mifflin, Boston, 2004. Mathematics Department, Introduction to Calculus, v 1.1, Camosun College, 1999. Course Content: Larson & Hostetler's Precalculus Appendix A Review of Fundamental Concepts of Algebra Section A1-A8 Chapter 1 Functions and Their Graphs Section 1.1-1.8 Chapter 2 Polynomial and Rational Functions Section 2.1-2.3, 2.5-2.6 Chapter 3 Exponential and Logarithmic Functions Section 3.1-3.5 Chapter 4 Trigonometry Section 4.1-4.7 Chapter 5 Analytic Trigonometry Section 5.1-5.5 Camosun College Mathematics Department's Introduction to Calculus Chapter 1 Introduction to Calculus Section 1.2-1.5 Page 1 of 2 Assignments: Suggested homework problems will be posted regularly on the course web site. You are expected to work on exercises in the textbook as part of your studying for the course; however, they are not to be handed in. Study Time: It is recommended that approximately 10-15 hours per week (or more for students with a weak background) be spent studying for this course outside of class time. Math Room: Ewing 224 (phone: 370-3503): This drop-in centre is freely available for your use to work on math homework and to seek help from the tutor on staff (see hours posted on door). Calculator Policy: Graphing or programmable calculators are not permitted on quizzes or the final exam, nor are electronic devices such as cell phones, PDAs, laptops, electronic translators, etc. However, an *ordinary scientific calculator* capable of the following operations will be required: ,  $yx \tilde{\mathbf{0}}$ , log , ln , , sin , c , and . xe os tan Tests: There will be six quizzes throughout the term. Quizzes will take place in class every Wednesday starting the second week of class. Solutions will be posted on the course website following each quiz.

Grade Calculation: The final grade will be calculated according to the following breakdown: Ouizzes (best 5 of 6): 50%\*

Comprehensive Final Exam: 50% \*\*

\* The lowest quiz mark will be dropped when calculating the quiz average. This allows a student to be absent on any one quiz day for any reason, including illness, family emergency, etc., without penalty. There is no provision for "making up" a missed quiz. \*\* If your final exam mark is higher than your quiz average, then your final exam mark will automatically count 100% toward your final course grade.

Grade Scale: Final letter grades are assigned as follows (subject to the conditions above): 0-49 50-59 60-64 65-69 70-74 75-79 80-84 85-89 90-94 95-100

F D C C+ B- B B+ A- A A+ Page 2 of 2