

CAMOSUN COLLEGE - Class Outline Math 115 - Pre-Calculus 2 & Math 100 - Calculus
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TEXTS: (LH) Larson, Hostetler, *Precalculus*, 5th edition, Houghton - Mifflin 2001
 (IC) Math. Dept., *Introduction to Calculus* (Version 1.1)
 (L) Larson, *Calculus*, 7th edition, Houghton - Mifflin 2001

INSTRUCTOR: Wayne Matthews Phone #: 370-3107
 Home Phone: 598-7995 e-mail: mattheww@camosun.bc.ca
 Office: Ewing 266 Office Hours: 1030-1130 M->F, 1330->1430, T,Th

<i>UNIT</i>	<i>SECTIONS</i>	<i>HOURS</i>	<i>TOTAL</i>
1. Review, Analytic Geometry	(LH)		
Algebra Review	P.1 → P.5, P.7	2	
Graphing, Circles, Linear Equations	P.8, 1.1, 1.2	2	
Analytic Geometry	10.1 → 10.4, 7.1	6	
Inequalities, Functions, Graphing Techniques	P.6, 1.3 → 1.5	6	
	TEST # 1	2	18
2. Functions	(LH)		
Polynomial & Rational Functions	2.1 → 2.6	6	
Algebra of Functions	1.6, 1.7	2	
Exponential, Logarithmic Functions & Applications	3.1 → 3.5	8	
	TEST # 2	2	18
3. Trigonometry	(LH)		
Radians, Trigonometric Functions	4.1 → 4.3	3	
Graphs of Trigonometric Functions	4.4 → 4.8	7	
Trigonometric Identities and Equations	5.1 → 5.5	8	
	TEST # 3	2	20
4. Introduction to Calculus	(IC) (Booklet)	8	8
	Math 115 Final	2	2
1. The Derivative	(L)		
Limits, Definition of the Derivative	P.1 → 2.1	5	
Derivative Rules	2.2 → 2.5	5	
Related Rates	2.6	3	
	TEST # 1	2	15
2. Applications of the Derivative	(L)		
Significance of First and Second Derivative	3.1 → 3.4	6	
Curve Sketching and Optimization Problems	3.6, 3.7	5	
Newton's Method, Differentials	3.8, 3.9	3	
	TEST # 2	2	16
3. Integration	(L)		
Integration	4.1 → 4.6	12	
Logarithmic, Exponential Functions	5.1 → 5.5	10	
Differential Equations	5.6	2	
	TEST # 3 (up to 5.4)	2	26
Labs, Review & Preparation for Final Exams		<u>11</u>	<u>11</u>
	TOTAL	134	134

- The *Introduction to Calculus* Booklet for Math 115 covers material (no trig) from Math 100. The sections partially covered from the *Calculus* text are P.1→P.3, 1.1 → 1.5, 2.1, 2.2, 3.1, 3.3, 3.5, 3.6, 3.7. These sections are part of the Math 100 course and we will be re-doing them but only some of it will be review.
- Assignments (at least one per unit) are due on or before the test date for that unit.
- There are no restrictions on technological aides in class or on tests, except maybe the final for Math 100. (for full marks, work **must** be shown).
- Need extra help?** Make arrangements with me or see the math tutors in the math lab (Ewing 224).
- If you improve on the final exam, more weight can be put on the final exam mark (100%).
- If you miss, or plan to miss a unit test, you must contact me immediately to discuss the possibility of other arrangements.