MATH 162 Mathematics for Computing

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Course Description

This course is designed for students in the Computer Technology Program at Camosun College.

Topics include: Introduction to Logic, Laws of Logic, Conditional Statements, Algebra of Sets, Logic Circuits, Boolean Algebra, Karnaugh Maps, Logical Inference and Direct Proofs, Indirect Proofs, Induction, Counting Techniques, Introduction to Probability, Introduction to Statistics, Pictures of Data, Measures of Central Tendency, Measures of Variation, Interpretations of Standard Deviation, Expected Value, the Binomial Distribution, and the Normal Probability Distribution.

Offered:	Quarter 3
Credit:	3
In-Class Workload:	4 hours
Out-of-Class Workload:	4 - 8 hours

Prerequisites Math 12 or Math 173 or Math 176 or Math 179 or assessment

Textbooks

(Bring the texts to the class.)

Trushel, Peter J. and Chi-Ming Leung, *Math 162 Logic and Statistics*, Camosun College bookstore 2000.
Trushel, Peter J. and Chi-Ming Leung, *Math 162 Logic Student Workbook*, Camosun College bookstore 2000.
(Optional) Raymond Lai, *Math 162 Solution Key*, Camosun College bookstore 2002.

Evaluation

Assignment: Assignment is given weekly. It is due on Wednesday. No late assignment is accepted. Solutions should be presented in a neat and clear fashion and the paper should be well organized and stapled at the top left corner if there is more than one page. Complete solutions will be posted.
They count for 10% 0f the final mark.

Test: There will be 4 tests. They count for 50% of the final mark.
There is NO makeup. Medical excuse must be accompanied by your physician's note.

Final Exam: This counts for 50% of the final mark. There is **NO** makeup.

The following percentage conversion to letter grade will be used:

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+

Mathlab

Extra help available from assistant at the Interurban Math Lab: TB 142

Outline

Logic Topics

Hours	Reference	Topic
2	logic 1	Introduction to Logic
1	logic 2	Laws of Logic
2	logic 3	Conditional Statements
2	logic 4	Algebra of Sets
1	logic 5	Logic Circuits
2	logic 6	Boolean Algebra
1	logic 7	Karnaugh Maps
2	logic 8	Logical Inference and Direct Proofs
2	logic 9	Indirect Proofs
2	logic 10	Induction

Statistics and Probability Topics

Hours	Reference	Topic
2	stats 1	Counting Techniques
2	stats 2	Introduction to Probability
1	stats 3	Introduction to Statistics
2	stats 4	Pictures of Data
2	stats 5	Measures of Central Tendency
2	stats 6	Measures of Variation
2	stats 7	Interpretations of Standard Deviation
2	stats 8	Expected Value
2	stats 9	Binomial Distribution
2	stats 10	The Normal Probability Distribution

Office Hours

April 5, 2004 ---June 18, 2004

	Monday	Tuesday	Wednesday	Thursday	Friday
08:30-09:20	MATH 187 TEC 175	MATH 187 TEC 177	MATH 187 TEC 177	MATH 264 CC 104	MATH 187 TEC 177
09:30-10:20	**Office Hour**	**Office Hour**	**Office Hour**	MATH 264 CC 104	MATH 187 TEC 177
10:30-11:20	MATH 264 CBA 101	MATH 264 CC 104	**Office Hour**	**Office Hour**	**Office Hour**
11:30-12:20			MATH 264 CBA 101		
12:30-13:20			MATH 162 CBA 101		
13:30-14:20	MATH 162 CBA 101				MATH 162 TEC 173
14:30-15:20				MATH 162 CBA 101	

Extra office hours can be arranged by appointment.