

Course Outline

Fleming Course Title: Math for Technology I *

Fleming Course Code: 1300194

Course Description: This course is designed to prepare the student mathematically for a variety of technical areas. The topics covered are: significant figures and approximate numbers with applied calculations, fundamental concepts and operations, ratio and proportion, functions and graphs, linear equations, matrices, exponents and radicals, exponential and logarithmic functions, quadratic equations and formula manipulation. Emphasis will be placed on appropriate use of computer spreadsheets as a problem solving tool.

Course expectations* will be met at the secondary level upon completion of MAT 3A1, MTT 4G1 and independent modules that cover exponential functions, logarithmic functions and solving systems of linear equations using matrices. The modules will emphasize the appropriate use of computer spreadsheets as a problem solving tool.

Vocational Outcomes: Solve a variety of mathematical problems by using spreadsheet applications in the students chosen technical field.

Aim: To enable learners to develop basic math skills and to solve mathematical problems using Microsoft Excel.

Learning Outcome

Met in Course...

A.C.E.S. ¹	SMSS ²	CDCI-E ³	Other
Make calculations with correct levels of precision and accuracy	MTT 4G1	MTT 4G1	
Add, subtract, multiply and divide algebraic expressions	MAT 3A1 MTT 4G1	MAT 3A1 MTT 4G1	
Solve problems by applying the principles of ratio, proportion and variation.	MAT 3A1	MAT 3A1	
Graph Functions	MAT 3A1 MTT 4G1	MAT 3A1 MTT 4G1	Module in MTT 4G1 covers logarithmic functions
Solve formulae for a specific variable	MAT 3A1 MTT 4G1	MAT 3A1 MTT 4G1	

Solve linear equations graphically	MAT 3A1 MTT 4G1	MAT 3A1 MTT 4G1	
Solve linear equations in two and three unknowns using matrices			Module in MTT 4G1 covers this topic
Simplify algebraic expressions containing exponents	MAT 3A1 MTT 4G1	MAT 3A1 MTT 4G1	
Convert radicals into an alternative exponential form	MAT 3A1 MTT 4G1	MAT 3A1 MTT 4G1	
Graph exponential and logarithmic functions	MAT 3A1	MAT 3A1	Module in MTT 4G1 covers logarithmic functions
Convert mathematical statements into appropriate computer format	BPC 3A1	TDJ 3G1	Modules in MTT 4G1
Solve quadratic equations	MAT 3A1	MAT 3A1	

Evaluation: Students will be evaluated according to the pre-existing criteria for MAT 3A1 and MTT 4G1 courses. The independent modules will be completed during the MTT 4G1 course and will be evaluated by the teacher who is delivering the program. Each module will be given the same weight as one half of a major unit test.

Team Leader _____ Date _____
Principal SMSS _____ Date _____
Principal CDCI-E _____ Date _____

1. Applied Computing and Engineering Science
2. St Mary's Secondary School Course Code
3. Cobourg District Collegiate Institute East Course Code

*Students are eligible for the Career Fast Track project with the following Mathematics path MTT 3G -> MTT 4G

These students will be responsible to complete a math course in a distributed learning format during the work term if they are proceeding to Fleming.