



## **EFFECTIVE: MAY 2005**

### **CURRICULUM GUIDELINES**

**A.** Division: **Instructional**

Effective Date: **May 2005**

**B.** Department / Program Area: **Mathematics/  
Faculty of Science & Technology**

Revision  New Course

If Revision, Section(s)  
Revi

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Subject & Course No.	Descriptive Title	Semester Credits
<b>F:</b> Calendar Description:		

This is a one semester course for students who wish to prepare for MATH 1120. Emphasis is placed on the graphing and solution of equations involving polynomial, rational, circular, trigonometric, logarithmic and exponential functions. This course is taught using a graphing calculator.

**M:** Course Objectives / Learning Outcomes

Upon completion of MATH 110 the student should be able to:

-----FUNCTIONS-----

-factor and graph any polynomial of degree  $n$  provided that the polynomial has at least  $n-2$  rational roots.

-obtain the functional rule for a polynomial when given certain information about the roots and a value that satisfies the function and graph the function.

-sketch the graph of proper and improper rational functions that have at most one horizontal asymptote or an oblique asymptote.

-solve 'word problems' that involve polynomial or rational functions.

-----EXPONENTIAL AND LOGARITHMIC FUNCTIONS-----

-recall the exact values of the trigonometric functions for reference angles of  $30^\circ$ ,  $45^\circ$

**N:** Course Content:

1. General Functions
2. Polynomial and Rational Functions
3. Exponential and Logarithmic Functions
4. Trigonometric Functions
5. Analytic Trigonometry and Applications
6. Conics
7. Systems of Equations

**O:** Methods of Instruction: