

## Master Syllabus

### **MET 1111 - Preparatory Math for Engineering Technology**

**Division:** Science, Mathematics and Engineering

**Department:** Mechanical Engineering Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 2.0

**Prerequisite(s):** MAT 1270

**Date Revised:** February 2014

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#### **Course Description:**

Mathematics for engineering technology students to prepare them for critical thinking, analytical reasoning and problem solving. Students will apply math to typical engineering technology problems from a variety of fields. Two classroom, two lab hours per week.

#### **General Education Outcomes:**

- ▣ Written Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Information Literacy Competency

#### **Course Outcomes:**

##### **Mathematical symbols and language**

Use mathematical symbols and language as a means of communication.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher correct responses on exams

##### **Algebraic operations**

Perform algebraic operations, solve for the unknowns, and graph equations. Read, define, and apply algebraic vocabulary and symbols.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher correct responses on exams

##### **Critical thinking, analytical reasoning and problem solving techniques**

Apply critical thinking, analytical reasoning and problem solving techniques to model and solve everyday problems using mathematics.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher correct responses on exams

#### **Outline:**

Perform algebraic operations

Graph equations and solve for the unknowns

Apply critical thinking and problem solving techniques

Define, model and solve simple engineering problems using mathematics

Use mathematical symbols as a means of communication