

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

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