

## Master Syllabus

### **MET 1101 - Introduction to Engineering Drafting**

**Division:** Science, Mathematics and Engineering

**Department:** Mechanical Engineering Technology

**Credit Hour Total:** 2.0

**Lecture Hrs:** 1.0 **Lab Hrs:** 2.0

**Date Revised:** February 2014

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### **Course Description:**

Interpretation of engineering drawings. Includes principles of orthographic projection, drafting symbols, surface finish symbols, welding symbols and geometric dimensioning and tolerancing symbols. One classroom, two lab hours.

### **General Education Outcomes:**

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

### **Course Outcomes:**

#### **Dimensioning techniques**

Demonstrate understanding of dimensioning techniques.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct score on exams

#### **Detailed Drawings**

Create detailed drawings that serve as working drawings for manufactured products.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct score on exams

#### **Drawing interpretation**

Read and interpret engineering drawings.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct score on exam

#### **Tolerancing symbols**

Use and application of symbols related to tolerancing (coordinate and geometric).

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct score on exams

#### **Standards**

Demonstrate knowledge of engineering standards and procedures.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct score on exams

### **Outline:**

Basic information on orthographic projection, isometric, auxiliary views, sectional views, and assembly drawing

Engineering drawing layout and standards

The SI Metric System

Engineering drawing symbols used and their meanings: machined surfaces, thread systems, and welding

Dimensioning and tolerancing practices and procedures

Coordinate tolerancing

Geometric tolerancing symbols used, their meanings and application