

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

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