

Syllabus

MET 106 Engineering Drawing II

General Information

Date January 11th, 2019 Author John Riley Department Science and Technology Course Prefix MET Course Number 106 Course Title Engineering Drawing II

Course Information

Credit Hours 3 **Lecture Contact Hours** 1 Lab Contact Hours 5 **Other Contact Hours** Λ **Catalog Description** Advanced techniques for creating, viewing, and plotting 2D and 3D CAD drawings will be presented. Lectures, demonstrations, and labs in a variety of applications will enhance the student's CAD ability and professional development. Topics include attributes; drawing views, assembly drawings, threads and fasteners, dimensioning, tolerances, bearings and shafts, and the design process. Students will use parametric solid modeling software. **Key Assessment** This course does not contain a Key Assessment for any programs Prerequisites None **Co-requisites** None **Grading Scheme** Letter

First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category None



Institutional Learning Outcomes Addressed by the Course

Inquiry

Perseverance

Interconnectedness

Course Learning Outcomes

Course Learning Outcomes

- 1. Selection and creation of the appropriate drawing views (orthographic, isometric, auxiliary, section, detail, broken, etc.)
- 2. Preparation of a set of working drawings including detail drawings, assembly drawings and bill of materials in accordance with ANSI dimensioning standard
- 3. Determine and apply different types of tolerances and calculation of hole and shaft sizes
- 4. Design and develop common cam designs, gear train designs and bearing applications

Program Affiliation

This course is required as a core program course in the following program AAS Mechanical Technology

Outline of Topics Covered

Topics To Be Covered

- 1. Introduction
- 2. Solid & Curved Objects
- 3. Adding & Altering Objects
- 4. Moving & Duplicating
- 5. Modifying & Maneuvering
- 6. Hatching & Sketching
- 7. Text
- 8. Tables
- 9. Drawing Setup
- ^{10.} Layers and Line Types
- 11. Plotting and Printing
- 12. Dimensioning
- 13. Calculation Commands
- 14. Groups & Blocks
- ^{15.} Dynamic Blocks
- 16. Attributes
- 17. Isometric Drawing