



## MASTER COURSE OUTLINE

Prepared By: Bill Autry

Date: September 2012

## COURSE TITLE

Technical Drawing Interpretation

## GENERAL COURSE INFORMATION

Dept.: IST

Course Num: 102

(Formerly: )

CIP Code: 47.0303

Intent Code: 21

Program Code: 768

Credits: 3

Total Contact Hrs Per Qtr.: 44

Lecture Hrs: 22

Lab Hrs:22

Other Hrs:

Distribution Designation:

## COURSE DESCRIPTION (as it will appear in the catalog)

Fundamental technical drawing reading and sketching principles, concepts and standards as applied to industry.

## PREREQUISITES

None

## TEXTBOOK GUIDELINES

Appropriate textbook as determined by faculty (Example: *Basic Blueprint Reading and Sketching*, by Olivio & Olivio).

## COURSE LEARNING OUTCOMES

*Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.*

1. Visualize multi-view drawings from various industrial disciplines.
2. Sketch simple multi-view and pictorial drawings.
3. Demonstrate knowledge of drawing nomenclature, symbols, notes and abbreviations.
4. Read and describe drawing data pertaining to dimensioning, tolerance and surface finish techniques as used on mechanical, architectural, manufacturing, electrical, piping, welding, and installation drawings.

## INSTITUTIONAL OUTCOMES

IO1 **Communication:** Students will be able to communicate clearly and effectively within a workplace context

## COURSE CONTENT OUTLINE

An introduction to industrial drawings and prints

A. The Orthographic System

B. The Alphabet of lines

C. Arrangement of views

D. Visualization

1. Multiview, Pictorial Drawings

E. Sketching

1. Multiview, Pictorial Drawings

F. Sectional Views

- G. Dimensioning, tolerance, surface finishes
- H. Threads and fasteners
- I. Title block information
  - 1. Revisions, scale
- J. Types of drawings
  - 1. Mechanical
  - 2. Architectural
  - 3. Manufacturing
  - 4. Electrical
  - 5. Piping
  - 6. Survey
  - 7. Mapping
  - 8. Schematic
  - 9. Welding
  - 10. Installation
- K. Symbols, notes, abbreviations, details, referencing
- L. Reading industrial drawings

**DEPARTMENTAL GUIDELINES** *(optional)*

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**DIVISION CHAIR APPROVAL**

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**DATE**