

TAM 131 Blueprint Reading 1 Course Syllabus

Course Title: Blueprint Reading 1

Course Abbreviation & Section: TAM -131-xxx

Credits: 3

Prerequisites/Corequisites: None

Description: The students will be able to interpret blueprint and solve problems related to tool and shop applications. Visualization skills, line type identification, section views, surface textures, screw threads, how blueprint specifications impact manufacturing techniques will be examined.

Textbook: MACHINE TRADES PRINT READING

Author: Barsamian / Gizelbach

Seventh Edition, ISBN 978-1-63126-105-3

Other Required Materials:

- Calculator: Casio fx-115ES recommended. This is the only calculator fully supported for the class and is appropriate for all TAM classes.
- eDrawings viewer (free download) for viewing digital drawing and part files

Course Learning Outcomes:

Upon completion of this course the student will be able to:

- correctly identify line types used in drawings.
- correctly interpret views and section views.
- correctly interpret machining processes, surface finishes
- identify Geometric Dimensioning and Tolerancing symbols on drawings (GD&T)
- correctly interpret tile blocks, change notices, and minor assemblies on drawings.
- correctly solve for missing dimensions on drawings.
- gain experience in viewing digital drawing and part files.

The following sections of the textbook are required reading and will be reviewed in the lectures. Homework will be assigned from the review questions at the end of the units and / or lecture discussions, either as a Blackboard assignment or quiz, both of which import into the Blackboard grade center. Additional testing outside of Blackboard will take place (~3 tests) and a comprehensive final exam will be scheduled at the end of the semester.

Unit	Topic
Unit 1	Drawings and Prints
Unit 2	Visualizing Shapes
Unit 3	Line Usage
Unit 4	Title Blocks and Notes
Unit 7	Dimensions and Tolerances
Unit 8	Contours
Unit 9	Holes
Unit 10	Angles
Unit 11	Threads
Unit 12	Machining Details
Unit 13	Section Views
Unit 14	Auxiliary Views
Unit 15	Geometric Dimensioning and Tolerancing
Unit 16	Detail Drawings
Unit 17	Assembly Drawings
Unit 18	Print Reading Review