MACH 52 Course Outline as of Spring 2000

CATALOG INFORMATION

Dept and Nbr: MACH 52 Title: BLUEPRINT RDING FOR MACH
Full Title: Blueprint Reading for Machine and Related Industries
Last Reviewed: 3/9/2020

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 175.00

Title 5 Category: AA Degree Applicable
Grading: Grade Only
Repeatability: 09 - 6 Units Within 4 Semesters
Also Listed As:
Formerly:

Catalog Description:
Blueprint Reading for Machine and Related Industries is a course in reading blueprints, sketches, and drawings used in manufacturing, assembly, and other industrial applications. Students will become familiar with how to read angles, dimensions, sectional drawings, industrial prints, title blocks, shop notes, etc.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Blueprint reading for machine and related industries is a course in reading blueprints, sketches, and drawings used in manufacturing, assembly, and other industrial applications. Students will become familiar with how to read; angles, dimensions, sectional drawings, industrial prints, title blocks, shop notes, etc.. (Grade Only)
Prerequisites/Corequisites:

Recommended:
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: 6 Units Within 4 Semesters

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Spring 2000	Inactive:	Summer 2010
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
The student will be able to:
1. Explain why drawings are so important to production planning and manufacturing.
2. Recognize viewing angles for the front, top, and side views of prints.
3. Identify the Alphabet of lines.
4. Describe the purpose of the title block and all of its meanings and uses.
5. Define the rules of dimensioning and the difference between size and location dimensions and dimensions with shop notes.
6. Identify basic geometric dimensioning, tolerancing, and datum referencing.

Topics and Scope:

1. Industrial prints, manufacturing prints, sketches, assembly drawings, and sectional drawings.
2. Three-view drawings, arrangement of views, two-view drawings, one-view drawing, and auxiliary views.
3. Object lines, hidden lines, center lines, extension lines, projection lines, other lines, and line combinations.
4. Title block, material block, revision block, print distribution block, zoning, and special title block.
5. Dimensions and notes.
6. Geometric dimensioning and tolerancing.

Assignment:

1. Students will read and study assigned chapters in the assigned text.
2. Students will be quizzed on lectures and text readings.
3. Students will be assigned drawings and sketches to read.
4. Students will sketch items assigned by instructor.
5. Students will research and obtain blueprint sketch or drawing from manufacturing firm or employer.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Lab reports	Problem solving 15 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams	Skill Demonstrations 15 - 20%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, Matching items, Completion	Exams 45 - 55%

Other: Includes any assessment tools that do not logically fit into the above categories.

ATTENDANCE	Other Category 10 - 15%

Representative Textbooks and Materials:
Print Reading for the Machine Trades, by Willfred Pouler, Delmar Publishers, 2nd Ed., 1995