

CATALOG INFORMATION

Dept and Nbr: MACH 51A      Title: MACHINE TOOL TECH  
Full Title: Beginning Machine Tool Technology  
Last Reviewed: 2/28/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	2.00	Lab Scheduled	3.00	8	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable  
Grading:                Grade Only  
Repeatability:        00 - Two Repeats if Grade was D, F, NC, or NP  
Also Listed As:  
Formerly:

**Catalog Description:**  
Use and care of the lathe, drill press and common hand tools. Measurement, layout and heat treatment of metal. Recommended for students in related vocational areas.

**Prerequisites/Corequisites:**

**Recommended Preparation:**

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Use & care of the lathe, drill press & common hand tools. Measurement, layout & heat treatment of metal. (Grade Only)  
Prerequisites/Corequisites:  
Recommended:  
Limits on Enrollment:  
Transfer Credit: CSU;  
Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>

<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
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<b>CSU Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:
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<b>UC Transfer:</b>		Effective:		Inactive:
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**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

The student will be able to identify common methods of measurement conversions. Identify most important parts of the lathe, drill, and mill relative to producing parts on manual machines.

### **Topics and Scope:**

Machine 51A gives the student hands-on experience on lathe, drill press, and mill. Although not taught in detail for job applications, students are exposed to machining from the consumer aspect. Processes and terminology of tools is discussed both in lecture and laboratory experience.

### **Assignment:**

Reading from assigned text, weekly quizzes based on reading and lab assignments developed by instructor.

### **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
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Writing 0 - 0%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Quizzes, Exams
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Problem solving 0 - 20%
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**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances

Skill Demonstrations  
0 - 40%

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

Multiple choice, True/false, Matching items

Exams  
0 - 30%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

Machine Tool Practices, Kibbe, R., Neely, D., and White, W.