

REEDLEY COLLEGE
Manufacturing 37A - Machine Shop (Turning)
General Information and Policies

INSTRUCTOR: Mr. Gene Evans
PHONE: 638-0313
OFFICE: IT16
OFFICE HOURS: Tuesday, Wednesday, Thursday 2:00 p.m. - 3:00 p.m.
DESCRIPTION: Vocational Machine Shop, 5 units, 10 hours weekly. Basic shop practices, measurement systems, bench work, metal cutting, grinding, drilling, threading, turning, CNC lathe operations.

Class meets in the Machine Shop on Monday and Wednesday from 8:00 a.m. to 12:50 p.m.

EXPECTED OUTCOMES:

1. The student will be able to select and properly use hand tools of the machine trade.
2. The student will be able to perform precision measurement and layout needed in the machine trade.
3. The student will be able to perform cutting, drilling and threading on a prescribed project.
4. The student will be able to set up and perform basic turning operations on an engine lathe.
5. The student will be able to perform basic CNC machining operations.
6. By the end of the semester the student will be able to satisfactorily pass the first six month machinist apprentice examination administered by the National Tool and Die and Precision Machining Association.

REQUIRED BACKGROUND:

None.

MINIMUM STUDENT MATERIALS:

1. Textbook - Machining Fundamentals - John R. Walker, Goodheart-Willcox, 1993.
2. Workbook for Machining Fundamentals - John R. Walker, Goodheart-Willcox, 1993.
3. Safety Glasses.
4. Shop Apron.

HOW CLASS WILL BE CONDUCTED:

1. Lecture -Tours - Demonstrations
2. Individual Instruction - Shop Work
3. Laboratory Manual - Quizzes - Apprentice Examination

TEXT:

Machining Fundamentals

LABORATORY MANUAL:

Workbook for Machining Fundamentals

AGENDA:

<u>Week</u>	<u>Unit</u>	<u>Textbook Pages</u>	<u>Workbook Pages</u>	<u>Agenda</u>
1-2	1-3	11-12 23-28	7 11	Occupations in machine technology Shop Safety (quiz - shop safety)
3	2	29-41	15	Understanding Drawings
4-5	4	55-78	23	Measurement (quiz - measurement)
6	5	81-87	33	Layout work
7	6	91-123	39	Hand Tools (quiz - layout, hand tools)
8	7	153-181	55	Drills and Drilling Machines
9	8	183-188	61	Offhand Grinding
10	9	191-198	65	Sawing and Cutoff Machines (quiz - drills, grinding, sawing)
11-14	10	201-270	69	Lathe (quiz - lathe)
15-17	16	399-420	123	Automation, Handouts, CNC Turning (quiz - CNC Turning)
18	FINAL EXAM	6 MONTH	APPRENTICE EXAM	

WORKBOOK ASSIGNMENTS:

<u>Unit</u>	<u>Date Due</u>	<u>Pages</u>	<u>Part</u>
1	Aug. 26	7	1-15
3	Sept. 2	11	1-20
2	Sept. 9	15	1-24
4	Sept. 16	23	1-9
	Sept. 23	27	10-40
5	Sept. 30	33	1-18
6	Oct. 7	39	1-30
7	Oct. 14	61	1-15
	Oct. 16	Last Day to Drop Class	
8	Oct. 21	65	1-10
9	Oct. 28	69	1-14
10	Nov. 4	71	15-21
	Nov. 11	73	22-36
	Nov. 18	117	1-30

CNC Handouts: Dec. 2 CNC Programming
 Dec. 16, 8:00-10:00 a.m. Final Examination

GRADING:

Laboratory Manual, 16 assignments, 20 points each	320 pts.
Quizzes, 7 each, 100 points each	700 pts.
Final Examination	200 pts.
Shop Work: Weekly shop work graded off time cards collected every two weeks, 50 points each time	400 pts.
Required Projects:	
Drill Sharpening	50 pts.
Saw Blade Welding	50 pts.
Tool Bit Sharpening	50 pts.
Lathe Turning	50 pts.
Threading	50 pts.
CNC Turning	50 pts.
Clean Up:	
Daily	150 pts.
End of semester clean up and preventative maintenance	<u>150 pts.</u>

TOTAL: 2520 pts.

GRADING: (continued)

2525 to 2270 = A

2269 to 2000 = B

1999 to 1750 = C

1749 to 1500 = D

Any assignment turned in up to one week late will receive only 50% credit. Any assignment more than one week late will receive no credit.

Extra points may be earned during the semester by attending field trips, doing research papers, or extra shop projects outside of scheduled laboratory time.

ATTENDANCE:

Roll will be taken daily. Any student missing more than three days per each 9-week period will be counseled by the instructors. If the student misses one additional day, he/she will be dropped from the class.

You are responsible to find out from the instructor any materials missed during an absence. Tests may be made up only with the instructor's permission.

GENERAL POLICIES:

You are responsible to bring required materials to class. Textbooks and safety glasses will be required daily.

Lockers will be provided for storage of projects and required materials.

Supplies will be provided by the school for required projects.

School policy prohibits smoking, eating, and drinking in the classroom and the laboratory.

Any conduct that disrupts or distracts the class or is dangerous will not be tolerated.

Willful violation of any safety rule that endangers the health of yourself or others will result in immediate dismissal from the class.

DROP DATE:

The drop date deadline will be October 16, 1998, the end of the ninth week. This will be the last date that a student will be able to drop a class without receiving the grade he or she has earned. A review of your class progress will be made at the end of the seventh week to assist you in this decision.

DATE: _____

NAME _____

**RC MFG 37A MACHINE SHOP (TURNING)
PROJECT SHEET**

LIST PROJECTS WORKED ON THIS SEMESTER:

1. _____
2. _____
3. _____
4. _____

LIST WORK DONE IN REQUIRED AREAS:

1. Drill sharpening (50 pts.) _____
2. Saw blade welding (50 pts.) _____
3. Lathe tool sharpening (50 pts.) _____
4. Lathe turning (50 pts.) _____
5. Threading (50 pts.) _____
6. CNC Turning (50 pts.) _____