

**NORTHEASTERN TECHNICAL COLLEGE  
COURSE OUTLINE**

<b>COURSE:</b> MTT	<b>PREFIX NO.</b> 126	<b>EFFECTIVE DATE</b> SPRING 2007	<b>NEXT REVIEW DATE</b> SPRING 2008		
<b>TITLE:</b> MACHINE TOOL PRACTICE III		<b>CREDITS</b> 4	<b>CONTACTS</b>		
			<b>CLASS</b>	<b>LAB</b>	<b>TOTAL</b>
			1	9	4

**PREREQUISITES:** MTT-124

**DESCRIPTION:**

LEVEL 1: This course covers practical application of the principles in Machine Tool Theory III.

LEVEL II: In this course the student will make parts that require form grinding to close tolerances after heat treatment.

**TEXTBOOK(S) OR ALTERNATIVE:**

Machining Fundamentals, John R. Walker

**MATERIALS (specifying those to be purchased by student):**

Safety glasses, 6-inch steel rule, and Allen wrench

**COLLATERAL READING:**

Machinist Ready Reference  
The New American Machinist Handbook  
Machinery's Handbook 27th Edition

**CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):**

**Academic Dishonesty:** Students are expected to do their own work. Please refer to the NETC Student Code and Grievance Procedure for a definition of academic dishonesty and an outline of the disciplinary action that may result therefrom.

**Disabilities Statement:** Students with disabilities are encouraged to contact the Vice President for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Vice President for Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See College Catalog).

**Department Rules:**

1. The student must attend 90% of classes. The student will be dropped from the class after 10% has been reached. Three tardies constitutes one absence. If you are late more than 15 minutes it will be counted as one absence.
2. The instructor will announce lab clean-up date each semester. All students have to attend or receive an "I" grade.
3. Daily lab clean-up and machine tool repair are course requirements.

4. There is no extra credit for lab clean-up or machine tool repair or additional work.
5. Cheating is not permitted; if caught you will be dropped from the course.
6. Dress must be appropriate for machine tool work and not for sports events. If dress is not appropriate the student will not be allowed to work in the lab and will be marked absent. **(No shorts, open-toed shoes, or baggy clothing!)**
7. Eye safety glasses are worn at all times in the lab. The student will be warned twice about the wearing of the glasses on the 3<sup>rd</sup> time will be asked to leave the class and will be marked absent that day and every day that he or she is told about the glasses.
8. Students must wear student ID at all times when on campus.

**RESOURCES (A-V, tools/equipment):**

Machine Shop Lab

**COURSE TOPICAL OUTLINE: (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.**

The student will perform the sequence of operations required for each project based on the availability of machines.

**OBJECTIVES OF COURSE:** The course covers the more advanced machining operation and theory of the machine shop. The student will demonstrate the ability to use the machine and its attachments in the shop to make their projects to part specifications.

**INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:**

Demonstrations on machine

**EVALUATIVE METHODS TO APPRAISE OBJECTIVES:**

Projects: All projects are to be completed by the due date given each semester by the instructor. Projects are to be completed at Northeastern Technical College during allocated lab times only. There are a total of 3 projects required in MTT 126.

1. Arbor Press
2. Vertical Milling Operations
3. Turning-Chucking Project

For each .001" inaccuracy- one (1) point will be deducted from project grade.

**GRADING:**

100 - 93	= A
92 - 85	= B
84 - 77	= C
75 - 69	= D
68 -BELOW	= F

**ARBOR PRESS**  
**25% Of Projects Grade**

- 1. FOLLOWS DRAWING (DIMENSIONS AND TOLERANCES) \_\_\_\_\_
- 2. MACHINING FINISHES \_\_\_\_\_
- 3. MECHANISM OR TOOL OPERATES SATISFACTORILY \_\_\_\_\_
- 4. GENERAL WORKMANSHIP \_\_\_\_\_

TOTAL GRADE \_\_\_\_\_

**75% OF GRADE**

**VERTICAL MILLING** \_\_\_\_\_

**TURNING-CHUCKING** \_\_\_\_\_

**GRADE FOR SEMESTER** \_\_\_\_\_