# MACHINE TOOL PRACTICE III

**COURSE:** MTT126  
**PREFIX NO.:** 126  
**EFFECTIVE DATE:** SPRING 2015  
**NEXT REVIEW DATE:** SPRING 2017

<table>
<thead>
<tr>
<th>TITLE: MACHINE TOOL PRACTICE III</th>
<th>CREDITS</th>
<th>CONTACTS CLASS - LAB - TOTAL</th>
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**PREREQUISITES:** MTT-124

**DESCRIPTION:**  
**LEVEL I:** 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:** Precision Machining Technology: Second Edition By Peter Hoffman

**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 Dean for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Dean 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 constitute 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 3rd 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.

STUDENT LEARNING OUTCOMES: 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. Extra work (written or practical) may be assigned by the instructor and counted as a grade. There are a total of 2 projects required in MTT 126.

1. Arbor Press
2. Vertical Milling Operation

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

3. Observation of work and Safety habits.
4. Observation of care of machines and tools. (For example- Cleaning machines and putting tools back in their rightful place.)

GRADING:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>100 - 93</td>
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<tr>
<td>B</td>
<td>92 - 85</td>
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<tr>
<td>C</td>
<td>84 - 77</td>
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<tr>
<td>D</td>
<td>75 - 69</td>
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<td>F</td>
<td>68 - BELOW</td>
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ARBOR PRESS
65% Of Projects Grade

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

TOTAL GRADE 

25% OF GRADE
VERTICAL MILLING 

10% OF GRADE
PARTICIPATION 

GRADE FOR SEMESTER 

PARTICIPATION: Evaluation of your participation will be based on the following:

(100-80) Comes to class prepared: voluntarily and enthusiastically participates in classroom activities, presentations, and clean up. Stimulates creativity and demonstrates excellent completion on in-class assignments and has good attendance. Must demonstrate respect to instructor and fellow students.

(80-60) Comes to class prepared; usually participates in classroom activities, presentation, and clean up. Demonstrates satisfactory completion of in-class assignments. Must have above average attendance, a positive attitude, and demonstrate respect for instructor and fellow students.

(60-40) Usually comes to class prepared; occasionally participates in classroom activities, presentations, and clean up. Completes most in-class assignments. Has average attendance, positive attitude, and demonstrates lack of respect for instructor and fellow students.

(20-0) Seldom comes to class prepared. Uncooperative and disruptive to class discussions or other learning activities. Has poor attendance and shows disrespect for instructors and fellow students. Avoid class clean up and/or has negative attitude.