

**NORTHEASTERN TECHNICAL COLLEGE  
COURSE OUTLINE**

<b>COURSE:</b> MTT	<b>PREFIX NO.</b> 121	<b>EFFECTIVE DATE</b> SPRING 2007	<b>NEXT REVIEW DATE</b> SPRING 2008		
<b>TITLE:</b> MACHINE TOOL THEORY I		<b>CREDITS</b> 3	<b>CONTACTS</b>		
			<b>CLASS</b>	<b>LAB</b>	<b>TOTAL</b>
			3	0	3

**PREREQUISITES:** None

**DESCRIPTION:** This course covers the principles involved in the production of precision metal parts.

**TEXTBOOK(S) OR ALTERNATIVE:** Machining Fundamentals, John R. Walker

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

**COLLATERAL READING:** Machinist Ready Reference  
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.

**Attendance:** The student must attend 90% of classes.

**Tardies:** Three tardies constitutes one absence.

**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*)

**Student ID:** It is mandatory that every student wear his/her student ID while on the Cheraw campus.

**RESOURCES (Audio-visual materials, tools/equipment):**

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

**TEST TOPICS:**

- 1<sup>st</sup> TEST: Safety
- 2<sup>nd</sup> TEST: Measuring Tools
- 3<sup>rd</sup> TEST: Understanding Drawing
- 4<sup>th</sup> TEST: Layout Tool
- 5<sup>th</sup> TEST: Hand Tools and Fasteners
- 6<sup>th</sup> TEST: Drills and Drilling Machines
- 7<sup>th</sup> TEST: Sawing, Cutoff Machines, and Band Machining

**OBJECTIVES OF COURSE:**

1. The course covers basic principles involved in the machining process.
2. The course also covers the setup and operation of machines and machine attachments along with measuring tool and the layout of piece parts.

**INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:** Tests and lecture on every subject covered from the text.

**EVALUATIVE METHODS TO APPRAISE OBJECTIVES:** There will be a test taken on every subject covered from the text. Review and pop quiz will be given at the instructor's discretion. This test will count the same as any scheduled test. Make-up test will be given in the Success Center at the convenience of the instructor. The test will cover the same contents but will have different questions. If tests are not taken on test day, 25 points will be deducted from the grade of the test taken late unless prior arrangements have been made with the instructor. Review date for exams will be announced by the instructor, and the exam will be given on announced exam date.

**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 given 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)**
7. Eye safety glasses are to be 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.

**GRADING:**

100 - 93 = A  
92 - 85 = B  
84 - 77 = C  
76 - 69 = D  
68 -BELOW = F

Test 50%  
Exam 50%

**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. 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.