

**NORTHEASTERN TECHNICAL COLLEGE  
COURSE OUTLINE**

<b>COURSE:</b> MTT	<b>PREFIX NO.</b> 211	<b>EFFECTIVE DATE</b> SPRING 2007	<b>NEXT REVIEW DATE</b> SPRING 2008		
<b>TITLE:</b> DIE THEORY		<b>CREDITS</b> 3	<b>CONTACTS</b>		
			<b>CLASS</b>	<b>LAB</b>	<b>TOTAL</b>
			3	0	3

**PREREQUISITES:**

MTT 124, MTT 141 and MAT 168

**DESCRIPTION:**

LEVEL I: This course is a study of die components as they relate to the complete die.

LEVEL II: The terminology, calculations and design principles involved in designing and making of cutting and forming dies will be covered.

**TEXTBOOK(S) OR ALTERNATIVE:**

Basic Diemaking  
Advanced Diemaking

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

Safety Glasses

**COLLATERAL READING:**

Machinery's Handbook

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

Student must attend 90% of classes.

Three tardies will constitute one absence.

Tests will be given at instructor's discretion.

A final exam will be given.

**Academic Dishonesty:**

NETC honors the State TEC Code with regard to Academic Dishonesty. Students should read pages 6-8 of the Student Code. Copies of the Student Code are available in Student Services.

**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 or her student ID at all times. Instructors are required to dismiss students without ID from class. The student may get his/her ID and return to class before the midpoint of the class. If the student cannot get an ID and return to class by the midpoint, the instructor will record the absence.

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

Audio-visual materials

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

OBJECTIVES OF COURSE:

At the successful completion of the course the student should:

1. Know principles of blanking and piercing dies
2. Identify and understand the purpose of common die components
3. Understand machining processes (EDM Technology, Grinding,...) and how they relate to geometric tolerancing in diemaking.
4. Know principles of calculating and providing die life
5. Know principles of bending dies
6. Know principles of Bolt and Dowell Construction
7. Layout stock strips that provide efficient stock material utilization

INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:

Class lecture  
Demonstrations and examples in machine tool lab  
Field trips to local industries  
Reading assignments and homework assignments

EVALUATIVE METHODS TO APPRAISE OBJECTIVES:

Written tests	60%
Exam	40%

GRADING:

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