Rochester COMMUNITY AND TECHNICAL College

COMMON COURSE OUTLINE: Course discipline/number/title: ELEC 1025: Digital I

A. CATALOG DESCRIPTION

1. **Credits: 4**
2. **Hours/Week: 3 hours lecture and 4 hours lab**
3. **Prerequisites (Course discipline/number):** None
4. **Co-requisites (Course discipline/number):** None
5. **MnTC Goals (if any):** NA

This course covers digital systems as they are analyzed through the use of Boolean Algebra. Flip flop circuits and arithmetic circuits are also covered.

B. DATE LAST REVISED (Month, year): September, 1998

C. OUTLINE OF MAJOR CONTENT AREAS:

1. Number systems
   a) conversion between number systems
   b) truth tables
   c) Boolean Algebra
   d) Invertor circuits
   e) And, Or, Nand, Nor Circuits
   f) Logic Diagrams
   g) Simplify Boolean equations
   h) Analyze Flip-Flops
   i) Analyze Arithmentic Circuits

D. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Have a basic understanding of digital Math.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:

1. Practical tests
2. Written tests

G. SPECIAL INFORMATION (if any): None