



A: Division

Instructional

Date

Aug 4, 1997

Revision of Course

X

Dated

March 12, 1992

Course number

Descriptive title

Credits

Course and Prerequisite Description

Summary of Revisions

This course introduces the theory and practice of digital circuits

*N: Textbook and Materials to be Purchased by Students*

McGraw-Hill

- Malvino, Brown, *Digital Computer Electronics*, Macmillan/McGraw-Hill
- Portfolio for logic design assignments
- Two 3 1/2" high density diskettes

*O: Course Objectives*

The student should be able to:

- demonstrate an understanding of the logic blocks composing a microprocessor
  - appreciate, via comparisons, the architecture of microprocessors
  - demonstrate the design and implementation of microprocessors

Course Content

1 Data representation

1.1 Number systems

1.1.1 Decimal, binary, octal, hexadecimal

1.1.2

1.2 Character representation

one and two's complement arithmetic  
hexadecimal  
character representation

Some topics such as VHDL and FPGAs may be introduced

2 Gates and combinational circuits

Method of Instruction

Of Methods

are three components to the course: lectures, labs., and assignments.

There a

e new material: usually via a sequence of theoretical concepts, examples

The lecture is used to introduc

*Summary of Revisions*

of reasons for changing the course number:  
ged the number of the corresponding course because the  
new version of the course has changed.

