ECE 301 Digital Electronics  
Tu Th 13:30-14:45 IN 204  
Instructor: Prof. Daniel Tabak, ST2 Rm.235 dtabak@gmu.edu  
Office hours: Tu Th 12:30-13:30 Jan.20-May 7,2009

COURSE OUTLINE
1. Binary and hexadecimal number systems. Binary arithmetic. Codes. [1,ch.1]. Week1, 1/20,22
3. Simplification of Boolean functions. 2,3,4,5-variable map simplification. NAND, NOR, XOR implementation. [1,ch.3]. Weeks 4,5, 2/10,12,17,19
5. Synchronous sequential logic. Flip Flops. [1,ch.5]. Weeks 8,9, 3/17,19,24,26
6. Registers. Counters. [1,ch.6]. Weeks 10,11,12, 3/31, 4/2,7,9,14,16
7. Memory structure. PLA. PAL. FPGA. [1,ch.7]. Weeks 13,14, 4/21,23,28,30

MAIN TEXTS (required)
2. ECE-303 Laboratory and Experimant Guide.

GRADING
Midterm 30% Th March 05,2009
Final 35% Th May 07,2009 (fixed by GMU)
Laboratory 20%
Homework 15%
All laboratories must be satisfactorily completed to receive a passing grade in the course.
Homework is due at the beginning of class on the date it is due. Late homework will not be accepted.
All questions concerning grades of the examination should be submitted in writing. The instructor has the exclusive right to establish the quantity of penalty points for errors. Honor code is in place for both the examinations and homework.

Homework no.1, due: Th Feb.5,2009
Chapter 1: 4, 7, 12, 14, 18, 23, 33(a)(d)

Homework 2, due Th Feb.12,2009:
Ch.2: 4(a)-(c), 8, 9(a), 14(a)(b), 18, 19

Homework 3: Due Feb. 19, 2009:
Ch.3: 1, 2(a)(b), 4(a)-(d), 6(a)(b), 7(a)

Homework 4: due Th Feb.26,2009
Ch.3: 8(a)(b), 9(a)-(c), 11(a), 12(b), 17, 19(a)

Homework 5: due Th March 19,2009
Ch.4: 4, 5, 13, 14

Homework 6: due Th March 26,2009
Ch.4: 21, 23, 25, 26
Homework 7: due Th April 2, 2009
  Ch.4: 29, 31, 32(a), 33, 35(b)

Homework 8: due Th April 9, 2009
  Ch.5: 2, 7, 9, 11, 15

Homework 9: Du Th April 16, 2009
  Ch.5: 3, 4, 6, 8, 10

Homework 10: due Th April 23, 2009
  Ch.6: 2, 6, 7, 12, 13

TA for homework: Mr. Aveek Gangopadhyay (agangopa@gmu.edu)
  Office hours in ST1 Lab.2B, Room 2D
    W 3 - 4pm; Th 12:00 - 1:30pm

TA for Laboratory: Mr. Mayowa Aregbesola (maregbes@gmu.edu)
  Meeting at the scheduled laboratory sessions.