ECEN 653 Computer Arithmetic Unit Design
Spring 2018

Instructor: Dr. M. Lu
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       (please mark 653 in email subject)
Office Hours: T Th 10:45-11:15a
Credit: 3 hours
Prerequisite: ECEN 651 or approval of instructor
Text:

       ARITHMETIC AND LOGIC IN COMPUTER SYSTEMS
       Mi Lu
       John Willey & Sons, Inc

Course Syllabus:

Week 1.   Computer Number Systems (Ch. 1)
Week 2.   Addition and Subtraction (Ch. 2)
Week 3.   High-speed Adders (Ch. 3)
 Week 4.   Multioperand Adders (Ch. 3)
Week 5.   Sequential Multiplication (Ch. 4)
Week 6.   Review, Exam 1
Week 7.   Recoding Technique (Ch. 4)
Week 8.   Array Multipliers (Ch. 5)
Week 9.   Spring Break
Week 10.   Array Multipliers (Ch. 5)
Week 11.   Standard Division, Restoring (Ch. 6)
Week 12.   Non-Restoring Div., High-Radix Div. (Ch. 6)
Week 13.   Array Dividers (Ch. 7)
Week 14.   Review, Exam 2
Week 15.   Floating Point Arithmetic (Ch. 8)
Week 16.   Residue Number Operations (Ch. 9)

Grading Policy: Homework 30%
        Exam 1 35%
        Exam 2 35%