# EE577b – VLSI System Design Nazarian Fall 2013 University of Southern California Department of Electrical Engineering

### Course Description

This is the third (and the final) course on VLSI design covering topics such as advanced digital memory design, high speed signaling, clock distribution jitter and skew, and advanced topics in low power VLSI design, timing analysis and signal integrity. Tasks required for the projects include architectural design and analysis, Verilog implementation, simulations for design verification, clocking and timing closure, etc.

#### <u>Website</u>

DEN: http://den.usc.edu/

#### Main Textbook

• CMOS VLSI Design: A Circuits and Systems Perspective, N. Weste and D. Harris

#### Additional (Recommended) Readings

- A Verilog HDL Primer, J. Bhasker
- Digital Systems Engineering, W. J. Dally and J. W. Poulton
- Digital Integrated Circuits: A Design Perspective, Jan M. Rabaey

#### **Prerequisite**

EE577A

#### <u>Instructor</u>

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## **Teaching Assistants**

TBA

#### <u>Graders</u>

TBA

Updated course information will be posted on den.usc.edu.