

## VLSI Design EE 523 Spring 2023

Shahid Masud Lecture 1

## Topics for lecture 3



- Simple working models for NMOS and PMOS transistors as switches
- Making logic gates from simple CMOS models
  - Inverter
  - Nand
  - Nor
  - AND-NOR combined gate
- Pass Transistor Logic using simple CMOS models
  - Non-restoring and Restoring switches

Reading from Weste and Harris 'CMOS VLSI Design' textbook: Chapter 1