# ECE122A - VLSI Principles

## University of California, Santa Barbara

### Department of Electrical and Computer Engineering

#### Fall 2019

Class Room: ESB 1003 (Cooper Lab) Tue & Thu 3:30PM-4:45PM

**Labs:** Tuesdays 8:00 AM-10:50 AM ENGR1 1140 (ECI lab)

**Instructor:** Prof. Kaustav Banerjee, Room 4151, Harold Frank Hall

Email: kaustav@ece.ucsb.edu

**Office Hours:** Fri 2:00PM-3:00PM or appointment by email.

TA: Arnab Pal (TA) arnab@ece.ucsb.edu

**Office Hours:** Tue. 2:00-3:30 PM or appointment by email

**Text Book:** *CMOS VLSI Design: A Circuits and Systems Perspective* (4<sup>th</sup> Edition),

Neil H. E. Weste and David Harris, Addison Wesley, © 2011.

**Supplementary Text:** *Modern Semiconductor Devices for Integrated Circuits* (First

Edition), Chenming Hu, Prentice Hall, © 2010.

**References:** To be posted on the class homepage:

**Prerequisites:** ECE152A (Digital Design Principles) or Equivalent

Elementary Level Semiconductor Device Physics (Desirable)

**Grading:** Homework (including lab) 20%

Midterm20%Final Project20%Final Exam40%

#### Note:

- Late homework will be penalized (20% per day).
- Must complete all labs and final project to pass.