ECE122A - VLSI Principles

University of California, Santa Barbara

Department of Electrical and Computer Engineering

Fall 2023

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: Appointment by email

TA: Ankit Kumar (TA) ankitkumar@ucsb.edu **Office Hours:** Wed 3:30PM-4:30PM or appointment by email

Text Book: *CMOS VLSI Design: A Circuits and Systems Perspective* (4th 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:

https://web.ece.ucsb.edu/courses/ECE122/122_F23Banerjee/

Prerequisites: ECE152A (Digital Design Principles) and Circuits (ECE 10A/B/C)

Recommend: Some exposure to Basic Semiconductor Device Physics

(or learn in this course)

Grading: Homework (including labs) 20%

Midterm 20% Final Project 20% Final Exam 40%

Note:

- Late homework will be penalized (20% per day).
- Must complete **ALL Labs** and **Final Project** to pass.