

Introduction to CS47, Sec01

Kaushik Patra
(kaushik.patra@sjsu.edu)

1



Instructor: Kaushik Patra

Office Location: DH 282

Telephone: (408) 924-5060

Email: kaushik.patra@sjsu.edu

LinkedIn: www.linkedin.com/in/kpatra/

- SJSU Alumni from CMPE
- Fifteen years in Electronic Design Automation (EDA) industry, currently working at Mentor Graphics.
- Worked for Texas Instruments, NeoMagic, SUN Microsystems, ORALCE, Synopsys.

Class Logistics

- Welcome to CS47, Section 01.
 - Mon / Wed DH135 @ 6:00 am – 7:15 pm.
 - Office hour DH282 @ Mon/Wed 4:30 pm – 5:45 pm.
- All the correspondence will be done using '**canvas**'.
 - <http://www.sjsu.edu/at/ec/canvas/>

3

- All the homes works and project submissions will be in electronic format (PDF or ODT or DOC or source code). No scanned copy of hand written solution will be accepted as valid submission.
- It is recommended to set the notification to email / text immediate.

Class Logistics

- Welcome to CS47, Section 01.
 - Mon / Wed DH135 @ 6:00 am – 7:15 pm.
 - Office hour DH282 @ Mon/Wed 4:30 pm – 5:45 pm.
- All the correspondence will be done using '**canvas**'.
 - <http://www.sjsu.edu/at/ec/canvas/>

4

- All the homes works and project submissions will be in electronic format (PDF or ODT or DOC or source code). No scanned copy of hand written solution will be accepted as valid submission.
- It is recommended to set the notification to email / text immediate.

Class Logistics

- Course prerequisite
 - CS 46B or equivalent with C- or better.
- Students **must complete pre-requisite survey** and upload **proof of eligibility** through CANVAS quiz.
 - Upload the proof by **08/26 midnight**.
 - A digital copy of unofficial transcript clearly showing **student name**, **student ID** and **grade** in CS 46B to be uploaded.
 - Upload equivalency form if needed.
 - Include academic standing (junior / senior / graduate). If senior, please attached a scanned copy of the senior card.
 - Students unable to send proof by 08/26 midnight will **not get** any add code or will be **dropped** from the class.
- Add code will be sent by **09/02/15** mid-night via email. ^s

- It is assumed that the students already have basic knowledge of digital logic and fundamentals of assembly language machine programming.
- If you are not yet on Canvas and waiting to be added in the class, please send email to kaushik.patra@sjsu.edu.
- All student must submit their proof of eligibility into Canvas.

Class Logistics

- Students not on canvas (waiting for add code) must send email tonight after the class today to kaushik.patra@sjsu.edu with the following information.
 - **Subject** should be '**[CS47,03] Request for canvas access**'
 - **Name**
 - **Student ID**
 - **SJSU registered email**

Class Logistics

- If any student **misses any two meetings** within first 3 meetings, that student will be **dropped** from the class.
- Each class session has lecture and hands-on
 - Lecture will be live (with reservation of some exception)
 - Hands on are part of lecture when needed.

Class Logistics

- There will **2 homework** and **1 projects**.
 - Homework carries **20%** towards final score.
 - Project carries **30%** towards final score.
- There will be one midterm and final exam.
 - Midterm carries **20%** towards final score.
 - Final carries **30%** towards final score

8

- Average of 2 score from homework will be contributed to your final grade.
- Score from projects will be contributed to your final grade.
- Projects are individual projects.
- Submission is allowed till 11:59 pm on due date. Zero delay tolerance for the submission, i.e. NO late submission is permitted, unless you make special arrangements with your instructor beforehand.
- There will no makeups for missed mid-term or assignments, unless any special arrangement is made with the instructor beforehand.

Class Logistics

- Project reports are recommended to be submitted in IEEE format.
 - http://www.ieee.org/conferences_events/conferences/publishing/templates.html
- Project report should contain the following.
 - Introduction containing objective.
 - Requirement.
 - Design and Implementation.
 - Testing
 - Conclusion

9

- Include clear diagrams for requirement and design.
- Include code snippet to explain implementation.
- Upload source code and test program as zip archive.
- ***10% of the obtained marks will be awarded as extra points in project evaluation if report submitted in proper IEEE format.***

Class Logistics

- You will receive a numeric score for the midterm, the final, each of the total homework, and each project submission. Letter grade, which is your class grade, will be obtained by adding the numeric scores and weighing with the percentages given below.

A+ = 100-97%	A = 96-93%	A- = 92-90%
B+ = 89-87%	B = 86-83%	B- = 82-80%
C+ = 79-77%	C = 76-73%	C- = 72-70%
D+ = 69-67%	D = 66-63%	D- = 62-60%
F = 59-0% Failure		

- Fraction in percentage will be converted into nearest integer value.
 - ≥ 0.5 will be moved to next integer number.
 - < 0.5 will be moved to previous integer number.

10

- 72.2% will be converted to 72%
- 72.4% will be converted to 72%
- 72.5% will be converted to 73%
- 72.8% will be converted to 73%

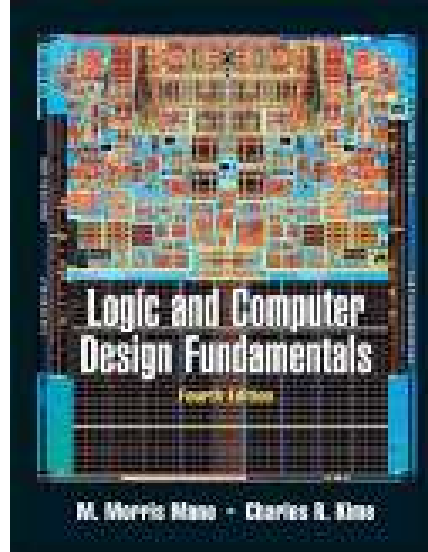
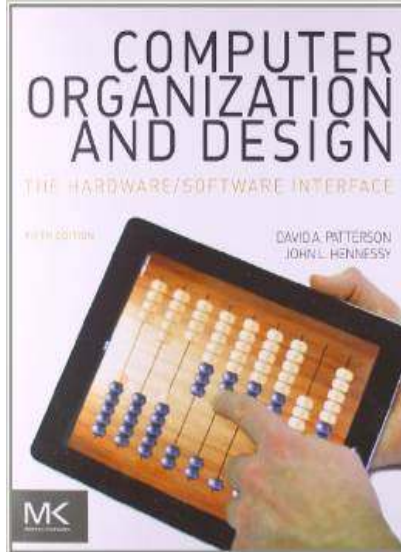
Class Logistics

- **You must come to class on time!** Students entering the classroom late disrupt the lecture and / or the students already in class who may be engaged in lab or discussion.
- If you miss a lecture **you are still responsible** for any material discussed or assignments given. A large portion of each class will be used for hands-on lab / discussion. All students are expected to participate in class activities. Students who are often absent will find themselves at a disadvantage during the tests.
- **No audio / video recording** or photography in the classroom without prior permission of instructor.
- **No personal discussion or cell phone activity** during class time. Please set the cell phone on **silent/vibrate** mode.
- All e-mail communication to the instructor must have the **subject** line start with **[CS-47,01]**
- Email to be sent to the instructor's **SJSU email ID** only.

11

CS47 Books

- Reference books.



12

1. Computer Organization and Design | Edition: 5

Author: David A. Patterson

ISBN: 9780124077263

Publication Date: 10/10/2013

Publisher: Elsevier Science

2. LOGIC & COMPUTER DESIGN FUNDAMENTALS

Author: MANO & KIME

ISBN: 9780131989269

Publication Date: 06/15/2007

Publisher: PEARSON

CS47 Challenges

- It is not an easy subject, it includes
 - Learning assembly programming.
 - Maths / Boolean Algebra
 - Drawing skills for logic schematic
- Practice, practice, ... and practice
 - Assembly programming
 - Schematic / logic diagram drawing
 - Maths and Boolean algebra – at least example shown in the class.
 - Exam is all about brain to hand coordination.
- 4x study time rule – need to spend 10hr. / week at least outside class hour.

Email Protocol

- Email protocol to be maintained.
 - Subject line should start with '**[CS47,01]**'
 - Proper salutation should be present
 - '**hi**' or '**hey**' is **NOT** accepted.
 - No first name basis communication.
 - '**Good morning Mr. Patra**' is a better salutation.
 - Email language should be **professional** – remember that you are not sending email to your friend.
 - Emails are responded within 24 hour if properly composed.

14

Introduction to CS47, Sec01

Kaushik Patra
(kaushik.patra@sjsu.edu)

15