COMPUTER ARCHITECTURE AND ORGANIZATION CECS 341

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LECTURE OUTLINE

- Course logistics
- Intro: Computer Abstractions and Technology (separate slides)

Course logistics (1/4)

- We will use BeachBoard to manage course
 - Announcements, course content, discussions
 - Mainly slides, but we'll use the blackboard
 - Email your questions to the instructor
 - o jelena.trajkovic@csulb.edu
 - Please put "CECS 341" in the subject!
 - Response within the 48h

• Office hours:

- Wednesdays 1:30 pm- 2:30 pm @ ECS-539
- Or by appointment

Course Logistics (2/4)

- Course Materials
 - Textbook: ZyBook
 - Sign in or create an account at learn.zybooks.com
 - Enter zyBook code: CSULBCECS341TrajkovicSpring2029
 - Subscribe
 - Development Environments:
 - <u>EDAPlayground.com</u>: web-based platform for the design, simulation, and analysis of digital systems related to concepts presented in lecture.
 - No installation necessary, just login and code.
 - <u>IF neede</u>d:
 - MARS MIPS simulator: to be downloaded from BeachBoard

Course logistics (3/4)

• Labs:

- Assignments are done individually
 - Assignments and due dates to be posted on the BeachBoard
 - Must demo the lab to the instructor on the specified date
 - Submit copy or report and all design files in ".txt" format to BeachBoard
 - o Go green! No printed report, but have paper and pen
- Budget you time:
 - Dedicate additional time outside lab hours to develop the solutions for your labs and test them out
- Lab time used to:
 - Solve problems workshop style!
 - Prep for the new lab assignment, and
 - Take demos
- "LabReportTemplate" is on BeachBoard, must include:
 - "I certify that this submission is my original work",
 - Your signature (can be e-signature)

Course Logistics (4/4)

- Homework Assignments
 - Assignments are done individually
 - E assignments posted on **ZyBook**, with the due dates
 - Submitting the E-assignment in ZyBook is **equivalent** to **signing** the following sentence: "I certify that this submission is my original work"!
- No credit for late submission of HW assignment or Lab report ☺
 - If sufficient time you might be able to get feedback (and up to 50% of demo only) for your late Lab demo
- o Read the syllabus and follow the announcements

GRADING SCHEME

• Laboratory 30%

• Assignments 20%

Midterm Exam 20%

• Final Exam 30%

• Attendance (3 unexcused) -5%

• Tentative dates: midterm 3/11

- Distribution of letter grades using grading curve
- On Note:
 - No make-up midterm exam
 - If absent on midterm, the final exam counts for 55%

LAST, BUT NOT LEAST...

- Issue?
 - Contact the instructor in timely manner
 - Within 1 week of the issue
- 4-week eval, in-class diagnostic, in-class examples...
- Academic Integrity
 - Lab report includes: "I certify that this submission is my original work" and your signature.
 - Min penalty: no credit for the work concerned and one grade lower letter grade
- Class discipline and participation
 - Devices, chatting, tardiness \rightarrow respect
- How do WE want to define this class and its policies?

GOAL OF THIS COURSE

- Learn principals on which the processors are designed and details of its implementation
 - From data representation, instructions, machine language, to processor (control, datapath, storage)
- Touch upon hardware description language
 - Will be used to design, simulate and analyze components and parts of the processor
- o Have fun!