**­­SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**

**CALIFORNIA STATE­­ UNIVERSITY, SAN BERNARDINO**

**Fall Semester 2024, Lawrence Orijuela**

**Course Number:** CSE 3100 Section 07 (3 Units)

CSE 3100 Section 08 (1 Unit)

**Course Title:** Digital Logic

**Instructor:** Lawrence Orijuela

Lawrence.Orijuela@csusb.edu

**Prerequisites:** CSE 2010, MATH 2720

**Textbook:** Fundamentals of Digital Logic with Verilog Design (Purchase not required. PDF on Canvas.)

**Meeting Times:** Lecture (07): M-W 5:30 PM - 6:45 PM

JB 360

Lab (08): M-W 7:00 PM - 7:50 PM

JB 360

**Grading:** Homework (~4) 20%

Lab (~4) 20%

Midterm 30%

Final 30%

**Letter Grade Assignment: A** 93-100 **A-** 90-92

**B+** 86-89 **B** 83-85 **B-** 80-82

**C+** 76-79 **C** 73-75 **C-** 70-72

**D+** 66-69 **D** 63-65 **D-** 60-62

**F** 0-59

**Office Hours:** Online Friday 5:00pm - 6:00pm

(Zoom Meeting ID: 867 3068 2576)

**Tentative Schedule (Subject to Change)**

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| --- | --- | --- | --- |
| **Week No.** | **Days** | **Topics Covered** | **Deliverables** |
| 1 | Aug27-Aug29 | Introduction |  |
| 2 | Sep3-Sep5 |  |  |
| 3 | Sep10-Sep12 | Introduction to Logic Circuits | HW1, Lab1 |
| 4 | Sep17-Sep19 |  |  |
| 5 | Sep24-Sep26 |  | HW2, Lab1 |
| 6 | Oct1-Oct3 |  |  |
| 7 | Oct8-Oct10 | Midterm | Midterm |
| 8 | Oct15-Oct17 | Number Representation and Arithmetic Circuits |  |
| 9 | Oct22-Oct24 |  |  |
| 10 | Oct29-Oct31 |  |  |
| 11 | Nov5-Nov7 |  | HW3, Lab1 |
| 12 | Nov12-Nov14 | Combinational-Circuit Building Blocks |  |
| 13 | Nov19-Nov21 |  |  |
| 14 | Nov26-Nov28 |  |  |
| 15 | Dec3-Dec5 |  | HW4, Lab1 |
| 16 | Dec10-Dec12 | Final Dec10 |  |
|  |  |  |  |

**Important Dates Aug 26** First day of Fall Semester

**Sep 2** Labor Day

**Sep 23** Fall Census Day

**Nov 11** Veterans Day

**Nov 28-30**  Thanksgiving Break

**Dec 6** Last Day of Classes

**Dec 9-14** Final Exams

**Dec 14** Fall Commencement

**Catalog Description**

Semester Prerequisite: CSE 2010 and MATH 2720.

Diodes and transistors, Boolean algebra and logic simplification, design and analysis of combinational and sequential circuits, memory elements, counters, introduction to hardware description language and FPGA programming. Three hours lecture and three hours laboratory. Materials fee required.

Formerly CSE 310.

**Lecture Times**

Lecture is held every Monday and Wednesday from 5:30PM - 6:45 PM in room Jack Brown Hall 360.

**Homework**

Homework contributes to 20% of your grade. There will be four homework assignments throughout the semester. (Subject to change.) If you need assistance, please don’t hesitate to reach out to me.

Here is my lateness policy:

* Less than a day late – no deduction.
* More than a day late – 10% deduction.
* More than a week late - 20% deduction.
* If I give out answers for HW, I can no longer accept it.

**Labs**

Labs contributes to 20% of your grade. There will be four lab assignments throughout the semester. (Subject to change.)

Lab is held every Monday and Wednesday from 7:00PM to 7:50PM in room Jack Brown Hall 360. Hosted by Giovanni Orijuela.

All lab submissions must be done using the Lab Report Template I have provided on BlackBoard/Canvas. You can submit your report in the BlackBoard/Canvas submission page (when they appear).

**Midterm**

Midterm contributes 30% of your grade. Will cover chapters 1-2.

**Final**

Final contributes 30% of your grade. Will cover chapters 1-4 or the last chapter that we reach.

**Office Hours**

I hold virtual office hours Friday from 5:00pm to 6:00pm. If you need to see me at this time, simply go to your myCoyote, click *Collaborate,* click *Zoom Conferencing, Join a Meeting,* and enter this Meeting ID: (867 3068 2576).

**Academic Honesty**

According to the CSUSB Catalog of Programs, plagiarism and cheating may result in penalties up to and including expulsion. Students are allowed and encouraged to discuss the material related to assignments, however writing down the solutions must be done individually. Exchanging solutions or parts of solutions is not allowed. When it comes to the attention of a student that possibly dishonest behavior took place, he or she should report it to the instructor. At the very least cheating on an assignment will result in a grade of zero.

**Academic Policies**

The student is referred to “Academic Regulations and Procedures” in the CSUSB Bulletin of Courses for the university’s policies on course withdrawal, cheating, and plagiarism.

**Disabilities**

If you are in need of an accommodation for a disability in order to participate in this class, please contact the instructor and the Services to Students with Disabilities at UH-183, (909) 537-5238. It is the student’s responsibility to seek academic accommodations for a verified disability in a timely manner.