SABANCI UNIVERSITY  
Faculty of Engineering and Natural Sciences  
CS303 – Logic and Digital System Design  
Fall 2022/2023 Syllabus

Instructor
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Office Hours: TBD

Teaching Assistants
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Class Schedule
Wednesday 13:40-15:30 (FENS G077)  
Thursday 16:40-17:30 (FENS G077)

Lab Schedule
A- Monday 14:40-16:30 (FENS 1033)  
B- Wednesday 15:40-17:30 (FENS 1033)  
C- Thursday 14:40-16:30 (FENS 1033)  
D- Tuesday 16:40-18:30 (FENS 1033)  
E- Wednesday 10:40-12:30 (FENS 1033)  
F- Monday 10:40-12:30 (FENS 1033)  
G- Monday 12:40-14:30 (FENS 1033)  
H- Thursday 10:40-12:30 (FENS 1033)

Recitation Schedule
Wednesday 18:40-19:30 (FENS G077)

Tentative Course Outline:

- Number Systems & Arithmetic
- Boolean Algebra & Logic Operations
- Gate-Level Minimization
- Analysis & Design of Combinational Logic Circuits
- Analysis & Design of Synchronous Sequential Logic Circuits
- Registers & Counters
- Design with Algorithmic State Machines (ASM)
- Memory & Design with Programmable Logic

Course Policies:

- Cheating will not be tolerated. Please submit your original work. If you submit any work violating academic ethics, you will get a ZERO for your first attempt. Repeating it will end up with an F grade.
- For any late submissions there will be a penalty.
  - Up to 1 day: 20% reduction
  - Up to 2 days: 50% reduction
  - More than 2 days: 100% reduction
- There will be 4-5 labs in total. Labs will be performed as a group work. Each group consists of 2 students.
- There will be a final course project, which will be a big development project compared to the labs. It is essential for students to meet the time schedule of the project. Each student must demonstrate his/her own work.
- For each lab that you did not submit, you will get a one-letter-grade-down.
- Homeworks will not be graded. However, you have to submit your homeworks. If you do not submit your homework or you submit a junk homework, you will get 1% reduction for each homework you did not submit. Homeworks are important to learn and practice.
- Attendance is important. Top Hat application will be used to record the attendance. For every 4 lectures that you did not attend, you will get 1% reduction in your final grade.

Grading Policy:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Midterm 1</td>
<td>20%</td>
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<tr>
<td>Midterm 2</td>
<td>20%</td>
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<tr>
<td>Labs</td>
<td>20%</td>
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<tr>
<td>Final Project</td>
<td>10%</td>
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<tr>
<td>Final</td>
<td>30%</td>
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<tr>
<td>Failing to submit homework (for each)</td>
<td>-1 %</td>
</tr>
<tr>
<td>Failing to attend 4 lectures (for each)</td>
<td>-1 %</td>
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Make-up Exam:

There will be a single make-up exam after the final exam. It is the responsibility of the student to contact the instructor if he/she needs to take the make-up exam. You should have a medical report to be eligible for the make-up exam.

Important Notes:

- In case of an online or hybrid education, your webcam and microphone should be on during the exams. In the case of non-compliance with this and other declared exam procedures, your exam will be void. Make sure to check that your webcam and microphone function properly before the exam.
- You may be given an oral exam to check the authenticity of the written exam by going through the questions of the written exam.
- You must attend the synchronous Zoom lectures, recitations, etc. and real-time online exams with your SU email account in case of an online or hybrid education.