CSE142 Syllabus

- **Course Objective**: To develop engineering skills in the analysis and design of complex digital circuits. The course will cover special Boolean properties, asynchronous and complex finite state machines design, and some basics on testing of digital circuits.

- **Prerequisites**: Design of combinational circuits and of simple Finite state machines. Some understanding of programming and electronic circuits is desirable but not essential.

- **Instructors**:

<table>
<thead>
<tr>
<th>Position</th>
<th>Instructor</th>
<th>TA</th>
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<tbody>
<tr>
<td>Name:</td>
<td>Alfredo Benso</td>
<td>Baris Arslan</td>
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<td>Phone:</td>
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<td>E-mail</td>
<td><a href="mailto:alfredo.benso@polito.it">alfredo.benso@polito.it</a></td>
<td><a href="mailto:barslan@cs.ucsd.edu">barslan@cs.ucsd.edu</a></td>
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<tr>
<td>Office Hours:</td>
<td>Mon &amp; Wed 9:00 a.m. - 9:50 a.m.</td>
<td>Tue &amp; Thu 11 a.m. - 12 a.m.</td>
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<tr>
<td>Location:</td>
<td>Office 4018</td>
<td>Office 3349D</td>
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- **Lectures**:  
  Monday, Wednesday, and Friday 10:00 a.m. - 11:50 p.m. (CENTR 212)

- **Discussions**:  
  Wednesday and Friday 1:00 p.m. – 2:00 p.m.

- **Attendance Policy**:  
  All material needed to pass the exam will be covered in class, so don’t miss classes. If you must miss a class, get a Dean’s excuse and then make an appointment to go over the missed material with me.

- **Handouts**:  
  Several handouts will be distributed during classes and will be made available through the course web-page.

- **Examinations**:  
  There will be four examinations for this course. Each will cover a different part of the course material. The first three will be administered during regular class meeting times and they will be multiple-choice exams. The fourth will be administered during the scheduled time for the course final and it will require the design of a complex Finite State Machine.
  - Exam #1: Monday, August 11th, 10:00 a.m. - 10:50 a.m.  
    Topics: Asynchronous Circuits Design
  - Exam #2: Monday, August 25th, 10:00 a.m. - 11:50 a.m. (2 hours exam)  
    Topics: Complex FSMs
  - Exam #3: Monday, September 1\textsuperscript{st}, 10:00 a.m. - 10:50 a.m.  
    Topics: Testing
Exam #4 - Final Saturday, September 6\textsuperscript{th}, (2 hours exam)
Topics: Special Boolean Functions (50%), Past topics (50%)

- **Evaluation:**
  Exam #1: (25%)
  Exam #2: (35%)
  Exam #3: (25%)
  Exam #4: (35%)
  (Total 120%)

- **Homework:**
  There will be homework problems assigned during the course. Homework will not be mandatory and they will not contribute to the final grading. Nevertheless, I strongly suggest solving homework problems, since they will be very similar to the problems assigned during the exams. Paper copies of solutions to homework problems will be posted on the course web site.

- **Collaboration Policy:**
  You are encouraged to talk to your classmates about homework problems. Collaboration will also be encouraged in solving exercises during classes. You may not consult previous years’ homework, labs, or exam solutions.

- **Re-grading Policy:**
  Sometimes you may disagree with the grades you receive. Since to err is human, it is possible that mistakes may occur during grading or grade-recording. You may appeal the grade you receive in an examination within three days from the day it is made available to you. To request an examination re-grade contact the instructor. After the three days period grades will be assumed correct and final.

- **Getting Help:**
  The best way to help yourself with this course is to attend lectures. There are several more ways to get help, preferably in the following order:
  a) Use the course newsgroup.
  b) See the TA during office hours.
  c) See the instructor during office hours.
  d) E-mail the instructor or the TA. PLEASE include CSE142 in the subject line of all e-mail correspondence.

- **Feedback:**
  If you have any concerns regarding the course please inform the instructor early during the term so that a prompt effort to solve them can be made. Comments and feedback are also solicited as early as possible. Finally, please do not hesitate to stop the instructor in class and ask questions. Remember that if you have a question others may do too and will benefit from your input.

*Have Fun...*

*Alfredo*