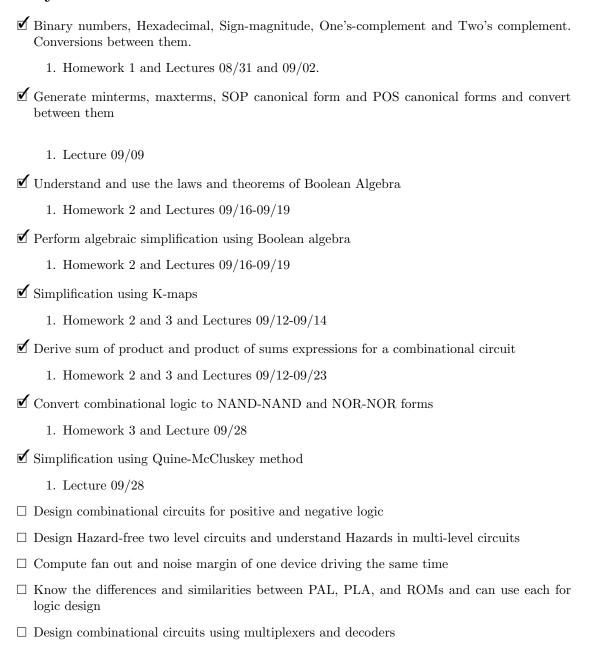
Study guide for Midterm 1

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1 Syllabus covered



☐ Describe now tri-state and open-confector outputs are different from totem-pole outputs.
\square Different between and limitations of master-slave and edge-triggered flip-flops.
\square Analyze a sequential circuit and derive a state-table and a state-graph
\square Understand the difference between synchronous and asynchronous inputs
\Box Derive a state graph or state table from a word description of the problem
\square Reduce the number of states in a state table using row reduction and implication tables
☐ Perform a state assignment using the guideline method
\Box Implement a design using JK, SR, D or T flip-flops
\square Analyse and design both Mealy and Moore sequential circuits with multiple inputs and multiple outputs
☐ Convert between Mealy and Moore designs
☐ Partition a system into multiple state machines
l Labs
\checkmark Use computer tools to enter designs graphically and HDL
☐ Simulate designs using computer tools
\square Use computer tools to program gate arrays logic and debug and test