ECE130-02/03 - Introduction to Logic Design

Course Schedule - Spring 2001

| Week | Day | Date | Topic | Reading | Notes |
|-------|------|--------|---|---------|-----------------------|
| 1 | Mon | 5-Mar | Introduction & switching circuits | | |
| | Tue | 6-Mar | logic expression & turn-signal circuit | 1.1-1.3 | Homework #1 due |
| | Thur | 8-Mar | number systems & 2's complement | 2.1-2.3 | Homework #2 due |
| | Fri | 9-Mar | binary arithmetics | 2.4 | |
| 2 | Mon | 12-Mar | Boolean algebra / canonical forms | 3.1-3.3 | Homework #3 due |
| | Tue | 13-Mar | Logic Works (bring your laptop) | 1.7 | Homework #4 due |
| | | | Analysis of combinational circuit, adders, | | |
| | Thur | 15-Mar | signal waveforms | 4.1-4.2 | Homework #5 due |
| | | | Implementation of combinational circuit, | | |
| | Fri | 16-Mar | logic verification, delay, 7400 series | 4.5 | |
| 3 | Mon | 19-Mar | Simplification with Kmaps & don't cares | 4.3 | Homework #6 due |
| | | | Design of combinational circuit, NAND- | | |
| | Tue | 20-Mar | NAND, NOR-NOR | 4.5-4.6 | Homework #7 due |
| | Thur | 22-Mar | Review | | Homework #8 due |
| | Fri | 23-Mar | Test #1 | | |
| 4 | Mon | 26-Mar | decoders | 5.1 | |
| | Tue | 27-Mar | multiplexers | 5.2 | |
| | Thur | 29-Mar | Hex, BCD, adders | 5.3 | |
| | Fri | 30-Mar | hazards and glitches | 5.5 | |
| 5 | Mon | 2-Apr | MSI designs | 5.6 | |
| | Tue | 3-Apr | tri-state buffers, map-entered variables | | |
| | Thur | 5-Apr | Test #2 / Latches and flip-flops | | |
| | Fri | 6-Apr | Test #2 / Latches and flip-flops | 6.2 | |
| Break | | | Spring Break | | |
| 6 | Mon | 16-Apr | Sequential Circuit Analysis: J-K ff example | 6.1 | |
| | Tue | 17-Apr | Sequential Circuit Analysis: D-ff example | | |
| | Thur | 19-Apr | device symbol with LogicWorks | | |
| | Fri | 20-Apr | Sequence detector design | 6.3-6.4 | |
| 7 | Mon | 23-Apr | railroad crossing | 6.3-6.4 | |
| | Tue | 24-Apr | railroad crossing | 6.3-6.4 | |
| | Thur | 26-Apr | Counters | 7.1 | |
| | Fri | 27-Apr | Shift Registers | 7.2 | Assign Design Project |
| 8 | Mon | 30-Apr | pop vending machine | 8.1-8.2 | |
| | Tue | 1-May | pop vending machine | 8.2-8.4 | |
| | Thur | 3-May | time bomb controller | 8.5-8.6 | Block Diagram Memo |
| | Fri | 4-May | Test #3 | | |
| 9 | Mon | 7-May | Design Project | | |
| | Tue | 8-May | Design Project | | |
| | Thur | 10-May | Design Project | | State Diagram Memo |
| | Fri | 11-May | Design Project | | |
| 10 | Mon | 14-May | Design Project | | Verification Memo |
| | Tue | 15-May | Design Project | | |
| | Thur | 17-May | quarter review | | Project Reports Due |
| | Fri | 18-May | Project Presentations | | |
| 11 | ? | ?? | Final Exam | | To be scheduled |