CMPS 3023

Tentative agenda:

Aug 24- A first look at microprocessors
Aug 26- Binary numbers and data representation - a review
Aug 31- Switching functions (AND, OR, NOT, NAND, NOR)

Sep 2- Boolean algebra/truth tables
Sep 7- Sum of products/product of sums
Sep 9- Simplifications/don’t cares
Assignment # 1
Sep 14- Karnaugh maps
Sep 16- 2-bit Comparators/adders
Assignment # 2
Sep 21- Other simplification methods
Sep 23- Introduction to VHDL
Assignment # 3
Sep 28- Decoders and encoders
Sep 30- Multiplexers
Assignment # 4

Oct 5- BCD to gray-code converter
Oct 7- Test # 1
Oct 12- Simple ALU (control input, data, output)
Oct 14- Flip-flop design, clock
Oct 19- Shift register
Oct 21- Binary counter - state machine
Oct 26- A simple vending machine
Oct 28- Moore and Mealy state diagrams

Nov 2- State diagrams/ tables
Nov 4- Mealy and Moore machines
Project assignment
Assignment # 5
Nov 9- RAM - addressing
Assignment # 6
Nov 11- ROM - look-up tables
Nov 16- String detection
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Nov 18</td>
<td>Test # 2</td>
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<tr>
<td>Nov 23</td>
<td>BUS</td>
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<tr>
<td>Nov 25</td>
<td>Thanksgiving Holidays</td>
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<tr>
<td>Nov 30</td>
<td>Control units</td>
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<tr>
<td>Dec  2</td>
<td>Control units</td>
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<tr>
<td>Dec  9</td>
<td>Finals (Thursday, 8:00 am)</td>
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