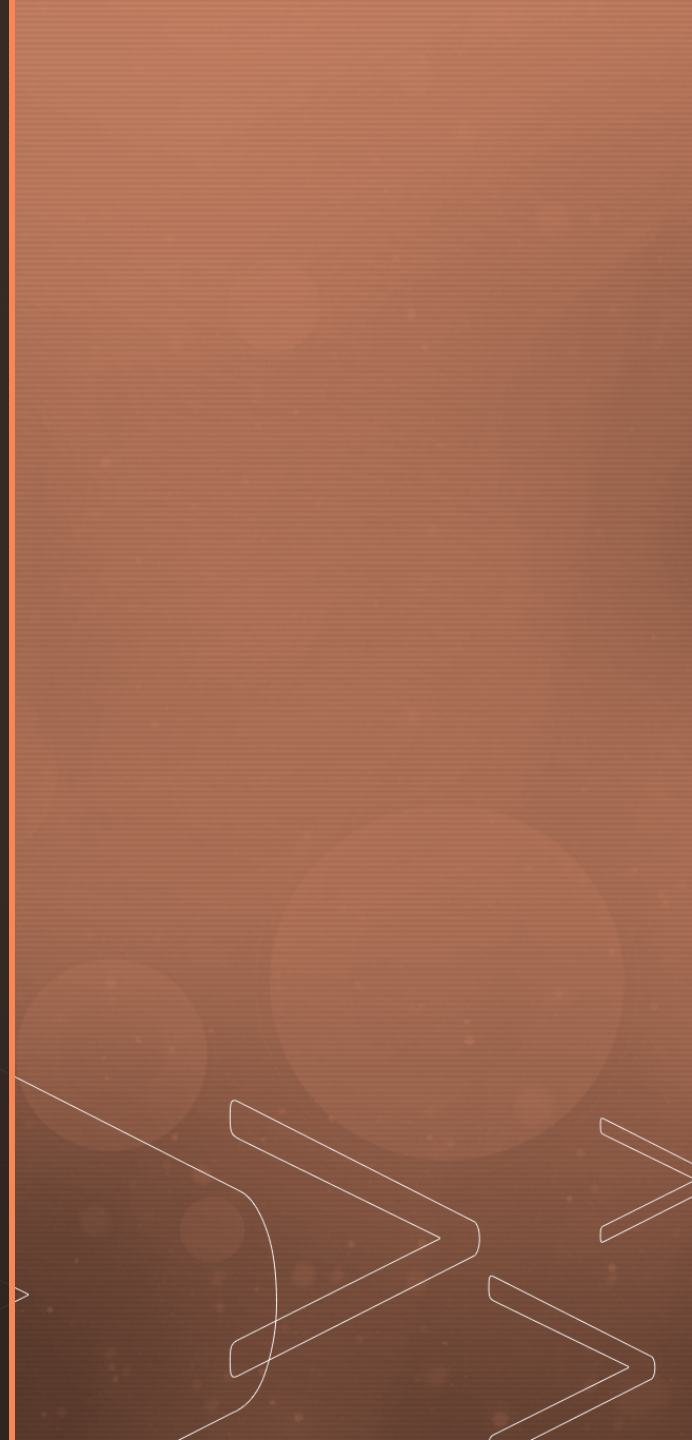Class Notes – Jeanie Hess

Digital Fundamentals

Digital Fundamentals Lecture 1

- Lecture 1a – Slide 20

  - Excel spread sheet that sums two decimal numbers converts to binary and back to binary.

- Lecture 1b – Slide 2

  - Excel spread sheet that uses columns of numbers to convert decimal to hexadecimal.

- Lecture 1b – Slide 5

  - Excel spread sheet concentrated columns to convert from binary to decimal.

- Lecture 1b – Slide 8

  - MultiSim simulated the differences between high and low voltage.

Digital Fundamentals
Lecture 3

- Lecture 3a

  - Excel spread sheet truth table for various logic gates.

- Lecture 3a – Slide 13

  - MultiSim simulation displaying how the Not gate works.

- Lecture 3 – Slide 16

  - Excel spread sheet showing outputs of for two input logic gates.

- Lecture 3 – Slide 16b

  - MultiSim simulation displaying results for OR gates followed by Not gates.

Digital Fundamentals Lecture 4

- Lecture 4 – Slide 16

  - Excel sheet showing two input Karnaugh Map

- Lecture 4 – Slide 17

  - Excel sheet showing a four input Karnaugh Map

- Lecture 4 – Slide 20

  - Excel sheet showing a three input conversion to a Karnaugh Map

  - MultiSim showing how to use Karnaugh maps to reduce a circuit with many logic gates.

Theorem were provided as a Midterm and Lecture 2 was provided as a lab