Lecture 3 – 08/28/2015

- Table 1.1
    - o Comparison between continuous-time and discrete-time exponentials

- Example 1.6

- Unit-impulse and unit-step functions
    - o Difference-Summation relationship
    - o Used for sampling
    - o Continuous-time versions
        - ▪ Unit-step has a discontinuity at t=0
        - ▪ Differentiation-Integration relationship
    - o Continuous approximation of the unit-step
        - ▪ Figure 1.39
        - ▪ The pulse that is short enough for a system idealization
    - o Example 1.7

- Systems
    - o Examples 1.8 – 1.11 (as time permits)

- Reading Assignment
    - o Interconnections of Systems