EE 210 Signals and Systems

Week 1 Summary:

1. Signals: their information content and structure via real-world examples.
2. Categorization of signals: continuous-time, discrete-time.
3. Useful signal measures (energy, power)
4. Basic transformations of the independent variable (shifting, scaling, reversal)
5. Some special signals in continuous-time and in discrete-time
   - Unit step, unit impulse
   - Complex exponentials and sinusoids
   - Periodicity properties of c-t and d-t sinusoids

Homework exercises (all problems from the textbook: Alan V. Oppenheim and Alan S. Willsky with S.H. Nawab, Signals and Systems, Second Edition, PHI (Indian reprint: 2014)). The problems are also provided in the accompanying files.

1.3 (a), (c), (d)

1.4 (a), (b), (e)

1.5 (e)

1.22 (d)

1.9

1.10

1.11

1.13

1.32, 1.33