

Topics for Test 2

- Random Processes
 - Power Spectral Density, $S_x(f)$
 - $E[X(t)]$
 - $\text{Var}[X(t)]$
 - Bandwidth
 - % In-band power
 - Properties of time averages
 - Variance of time averages
 - Ergodicity
 - Decomposition of RPs
 - Major classes of RP
 - Bandlimited White Noise
 - ARMA
- Response of Systems to Random Inputs
 - Discrete time systems
 - Continuous time systems
 - Output Power Spectral Density
 - Output autocorrelation functions
 - Output S/N