Cross Power Spectral Densities

The cross power spectral density is discussed in textbook chapter 10.1 (around equations 10.11 for continuous time, and 10.26 for discrete time). When passing through an LTI system, the cross power spectral density is discussed in textbook 10.2 around equation 10.44. In terms of example, I would suggest Example 10.11.

Bandlimited Random Processes

This is not required for the course. But if you plan to study communication theory in the future, it does not hurt to take a look at textbook 10.3. There are two main sections in this chapter. One is sampling of bandlimited random process, and the other is modulation. My comment on these is that they are not terribly different from the sampling theory and modulation theory you learned in ECE 301. The only thing you have to be careful is that for random processes, we have to study sampling effect of the autocorrelation function $R_X(\tau)$ because any $X(t)$ is just a realization of a random process. Similarly, for modulations we have to study the modulated power spectral density, and not the Fourier transform of $X(t)$. 