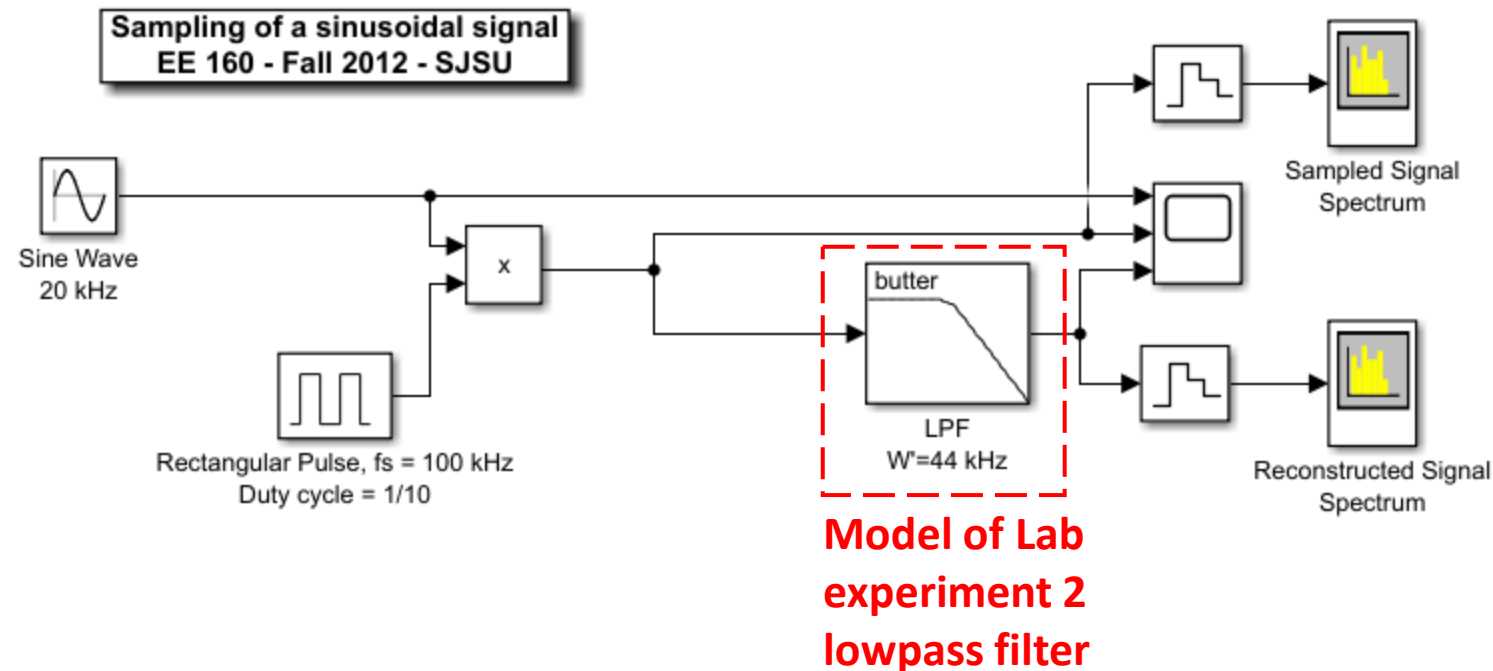


# Simulink models on Sampling

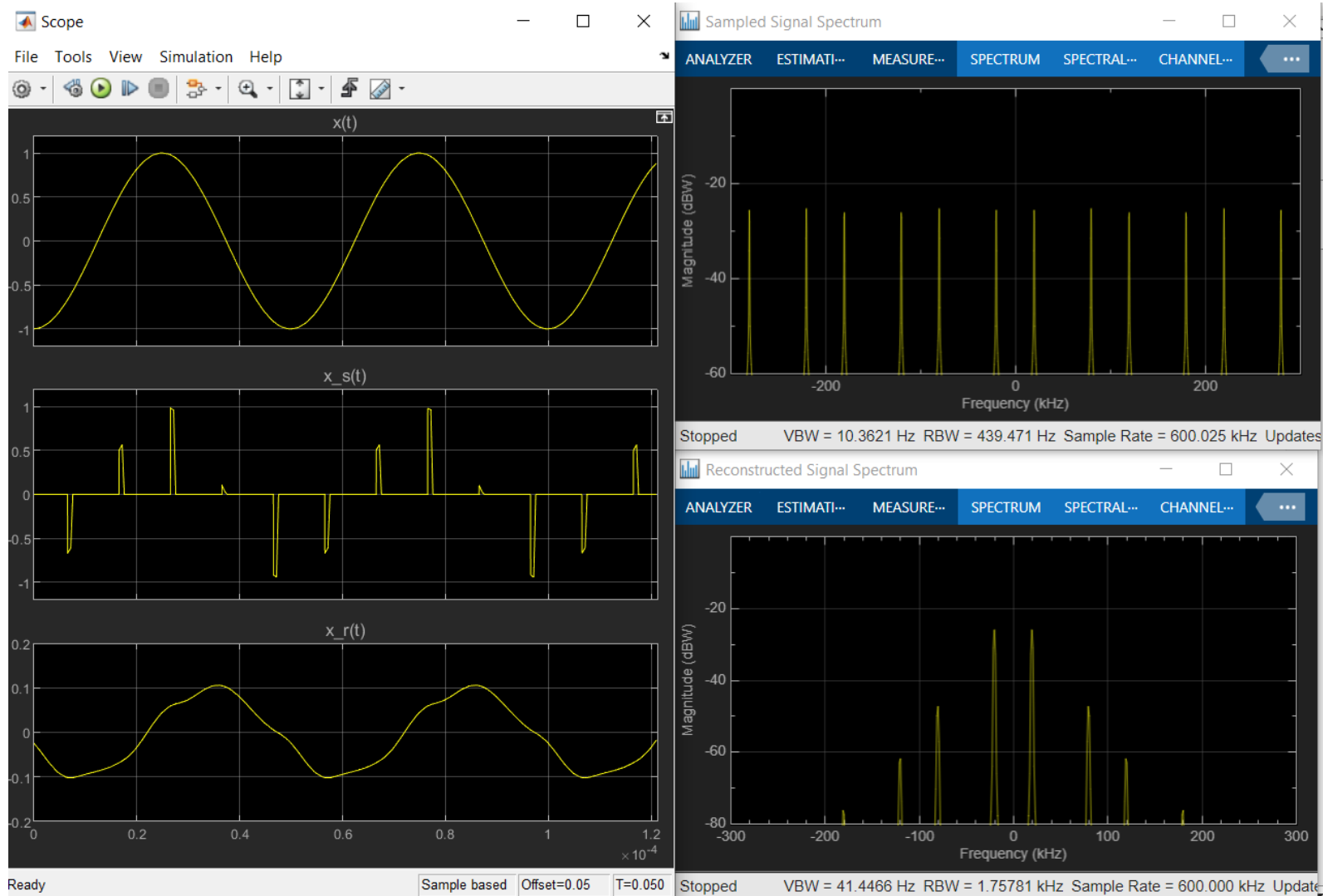
Professor Robert Morelos-Zaragoza  
EE160: Principles of Communication Systems  
San José State University

# Practical sampling of a sinusoidal signal

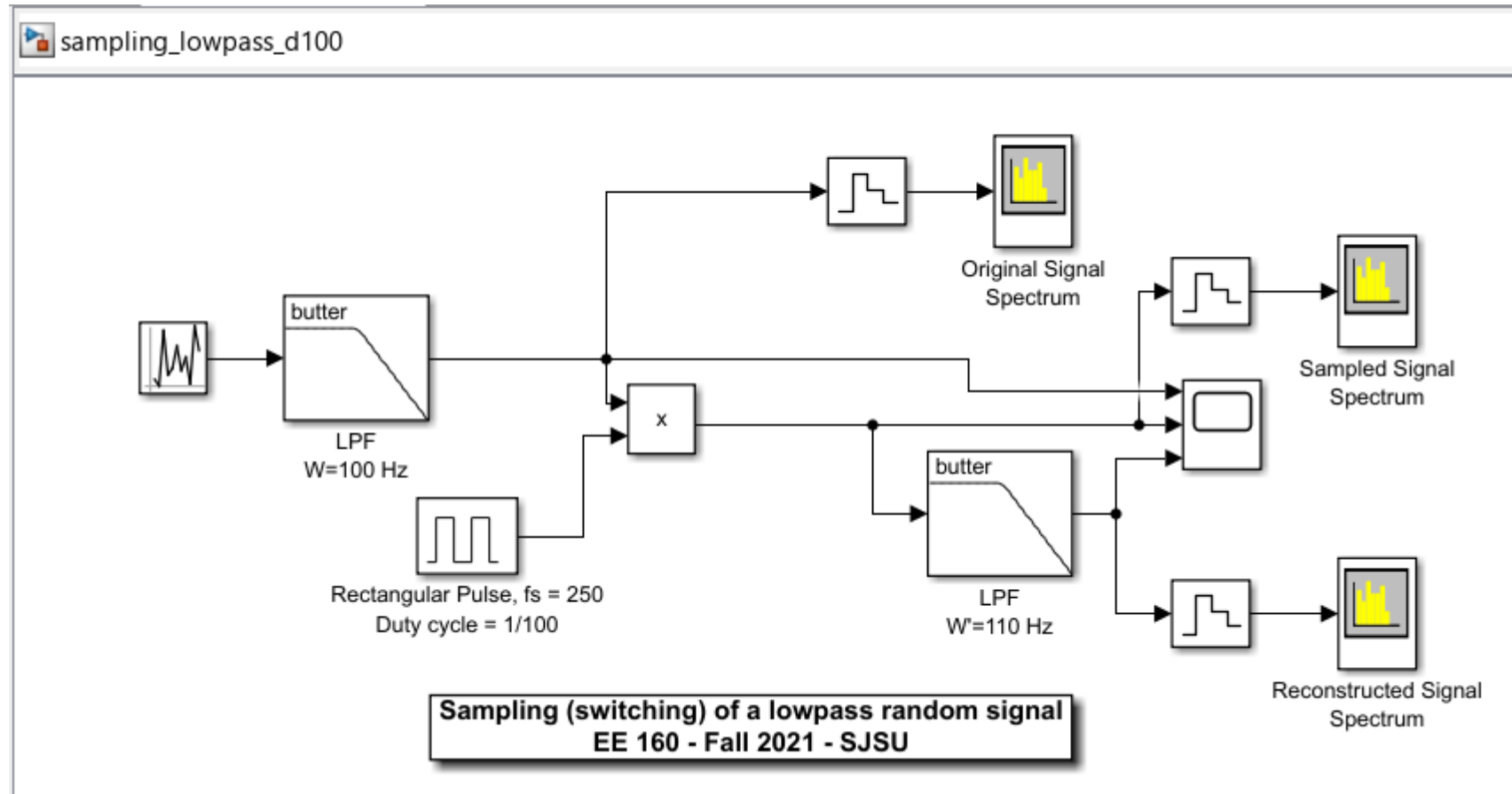
sampling\_lowpass\_sinusoidal



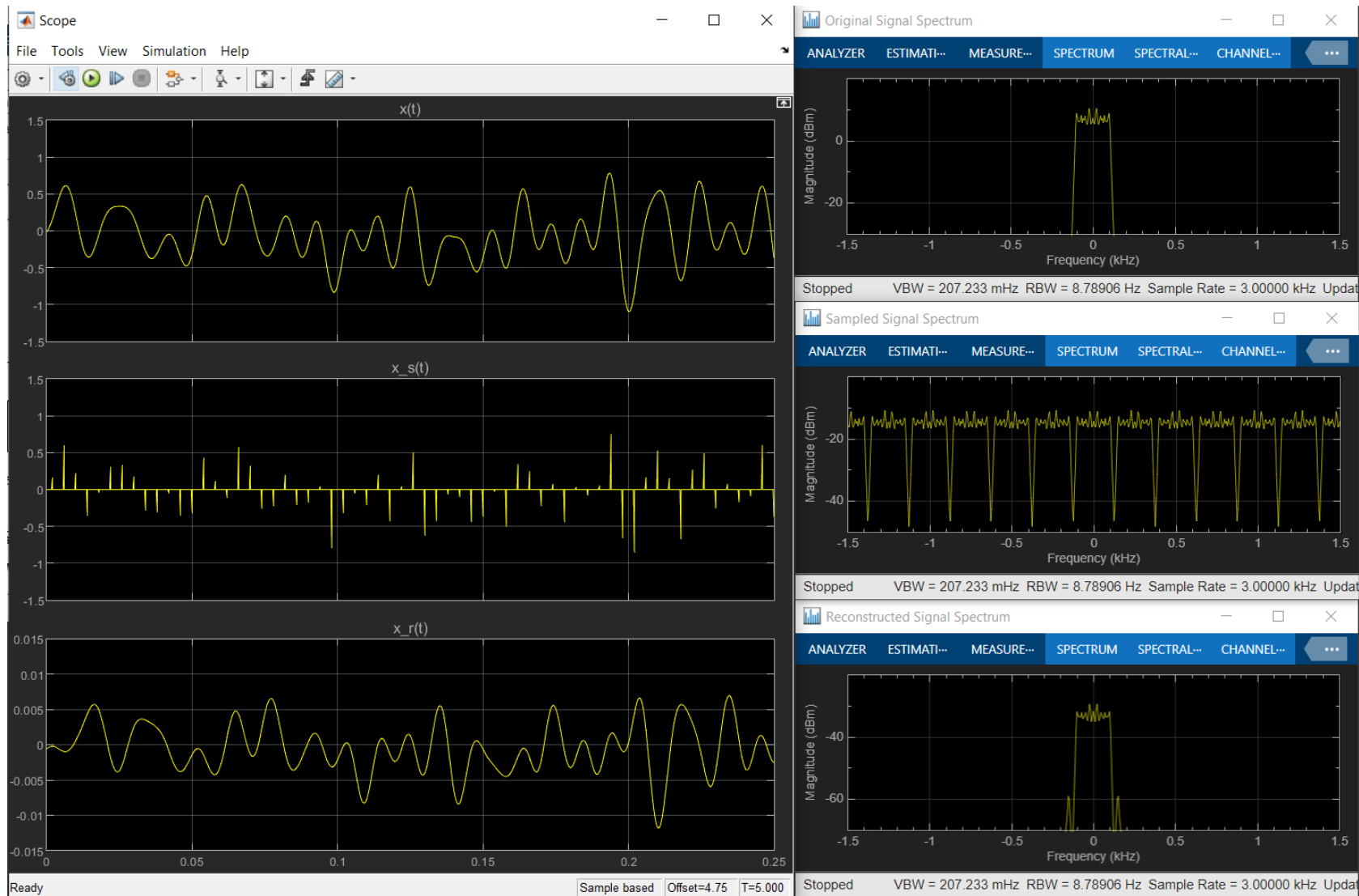
# Practical sampling of a sinusoidal signal (cont.)



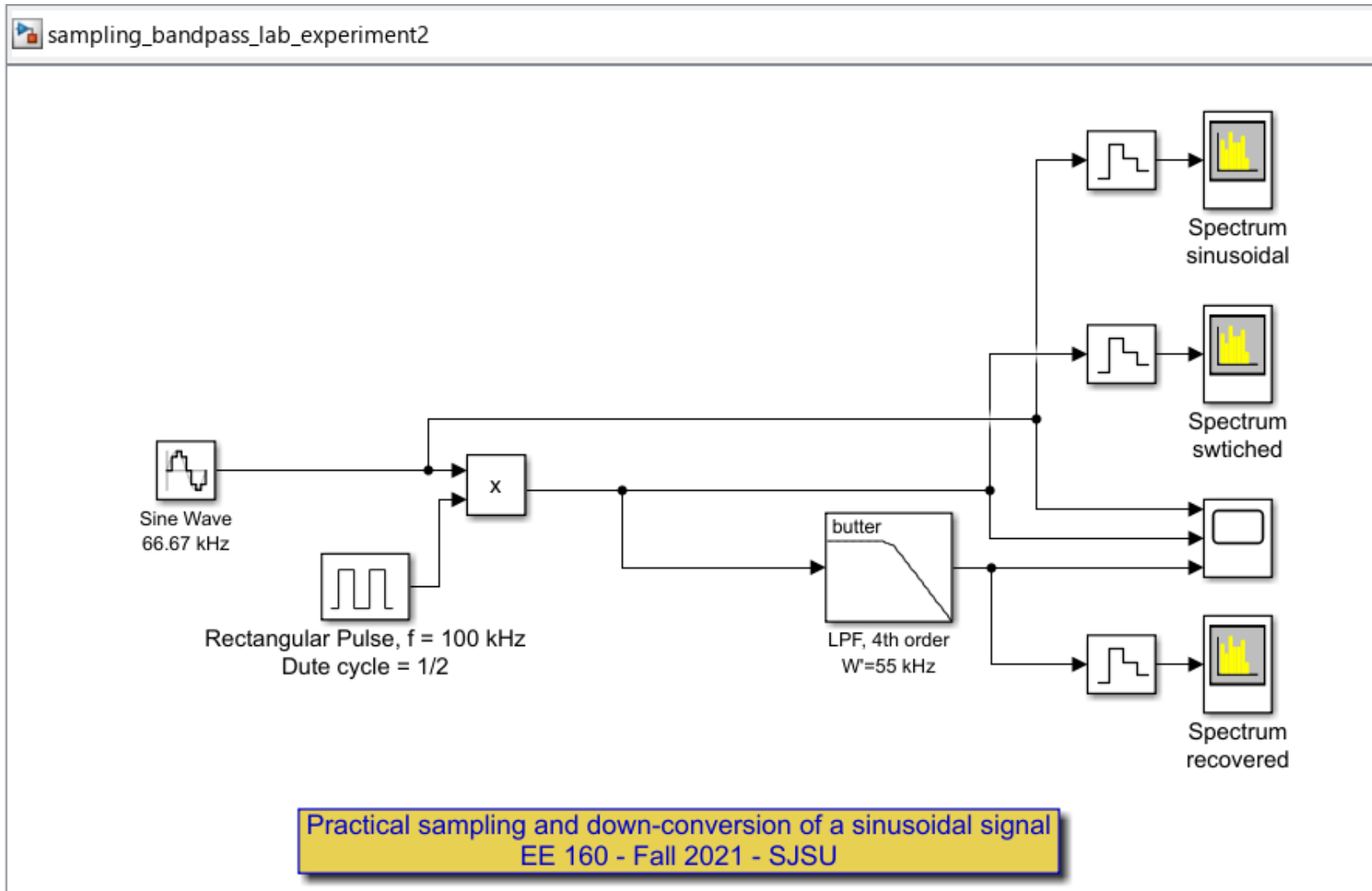
# Practical sampling of a lowpass signal



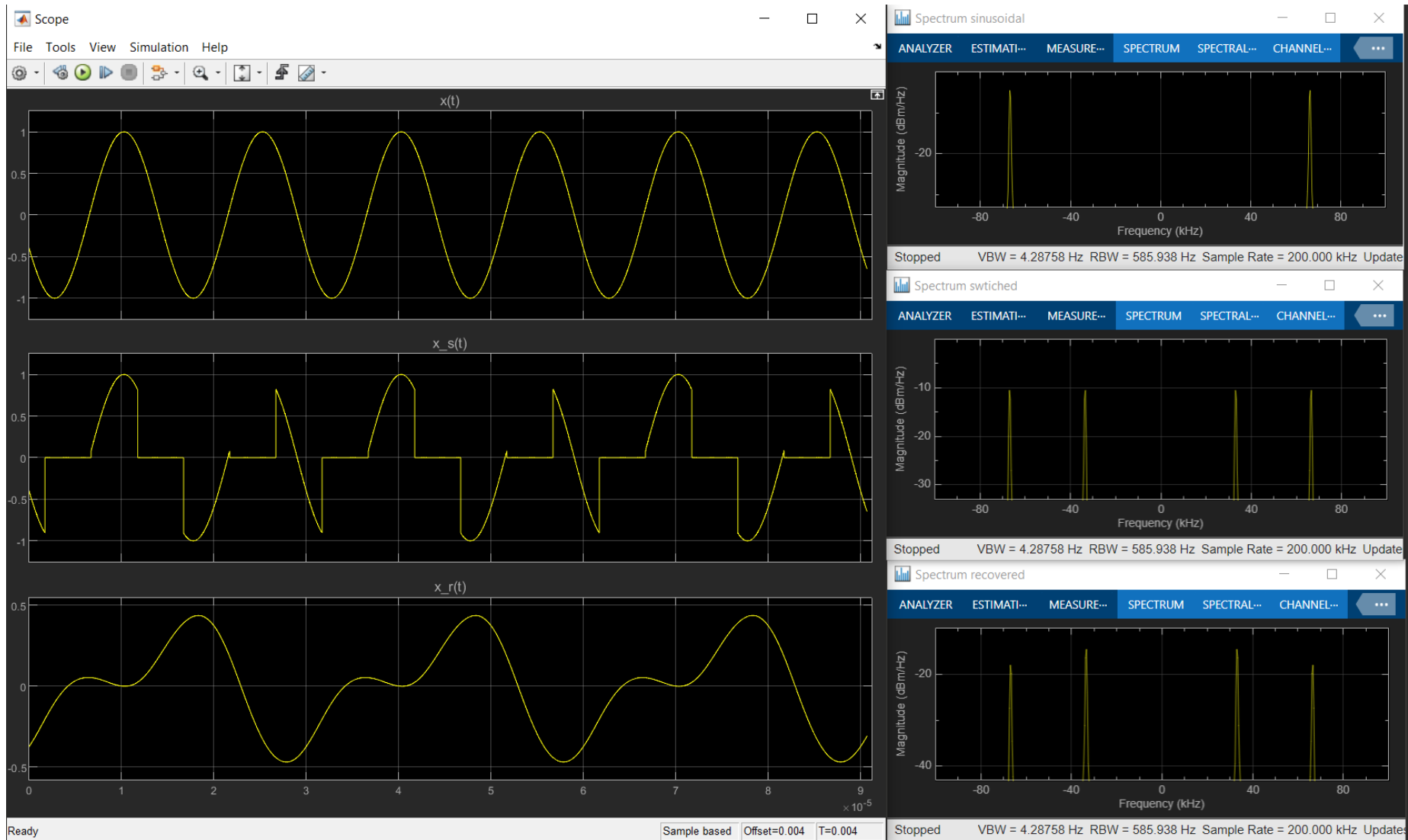
# Practical sampling of a lowpass signal (cont.)



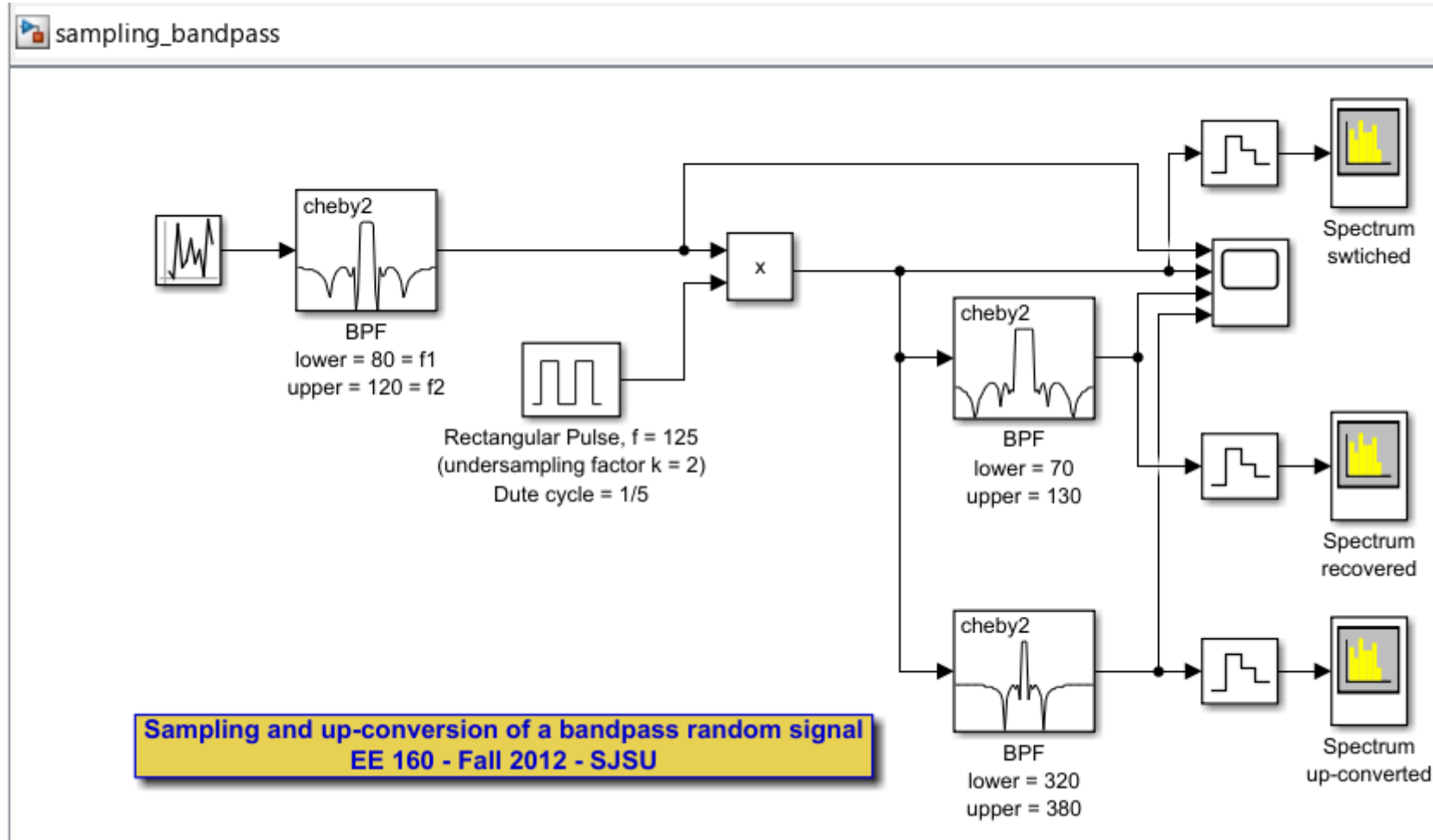
# Sampling for downconversion



# Sampling for downconversion (cont.)

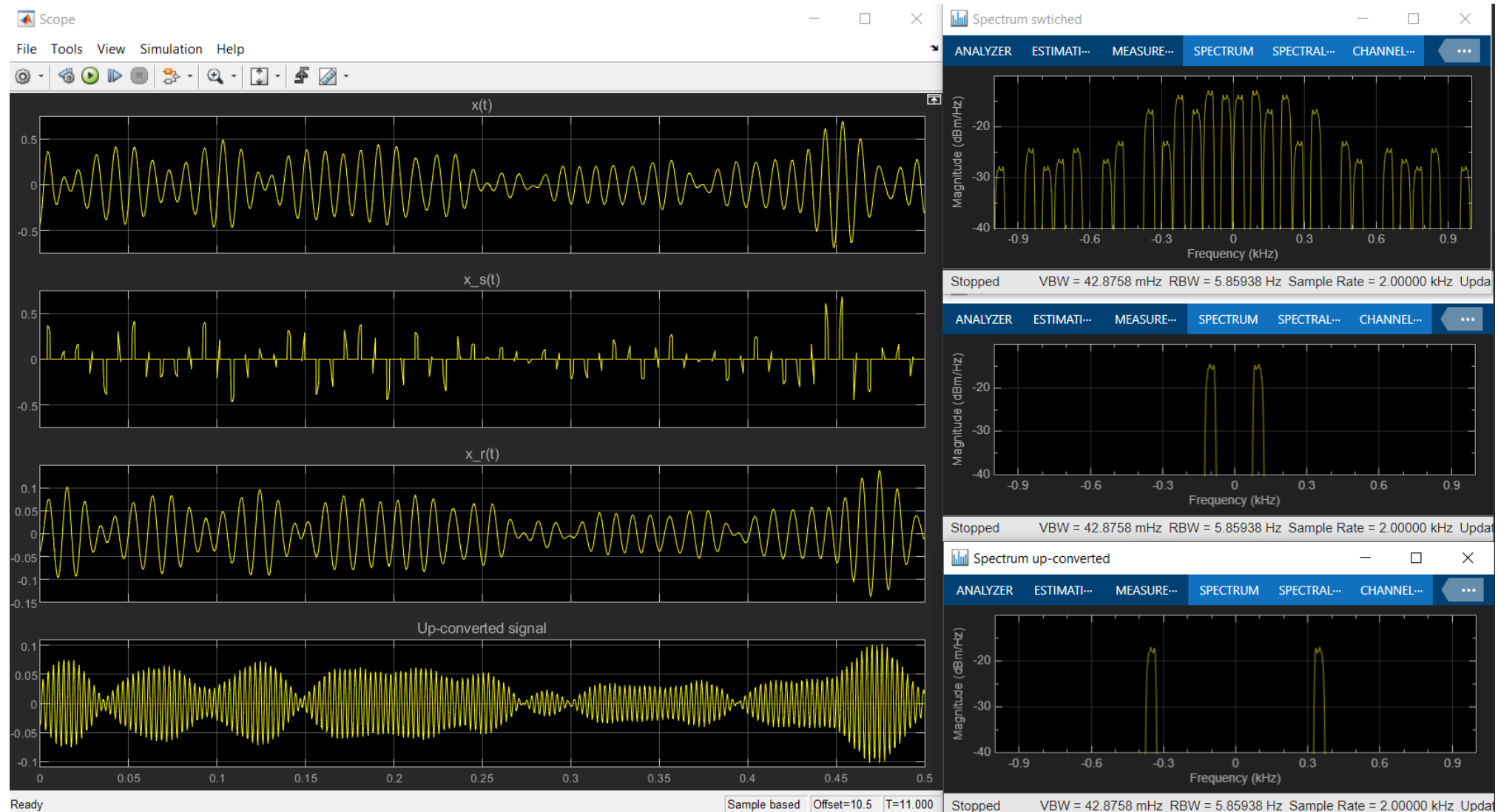


# Bandpass sampling




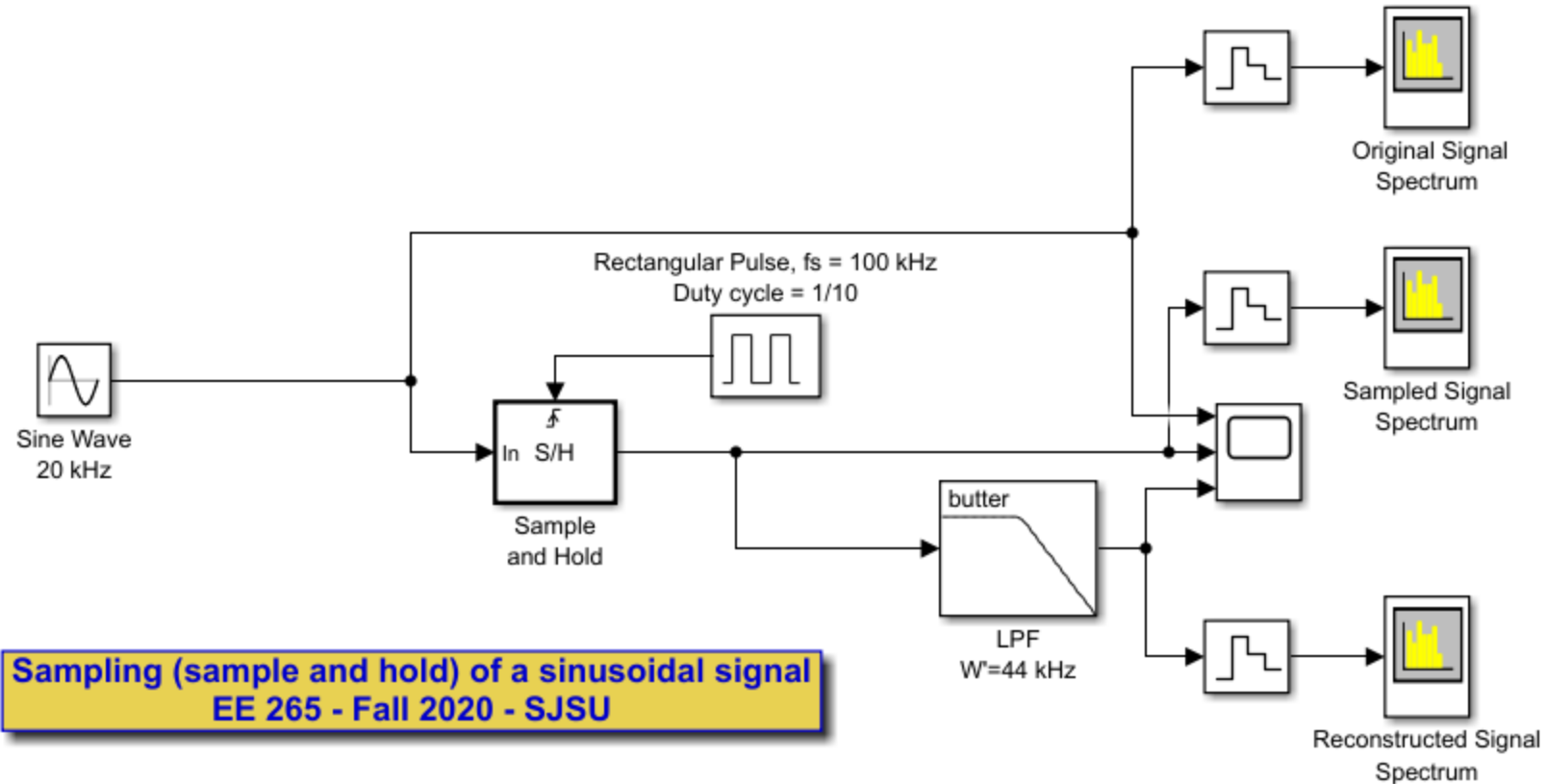


# Bandpass sampling (cont.)

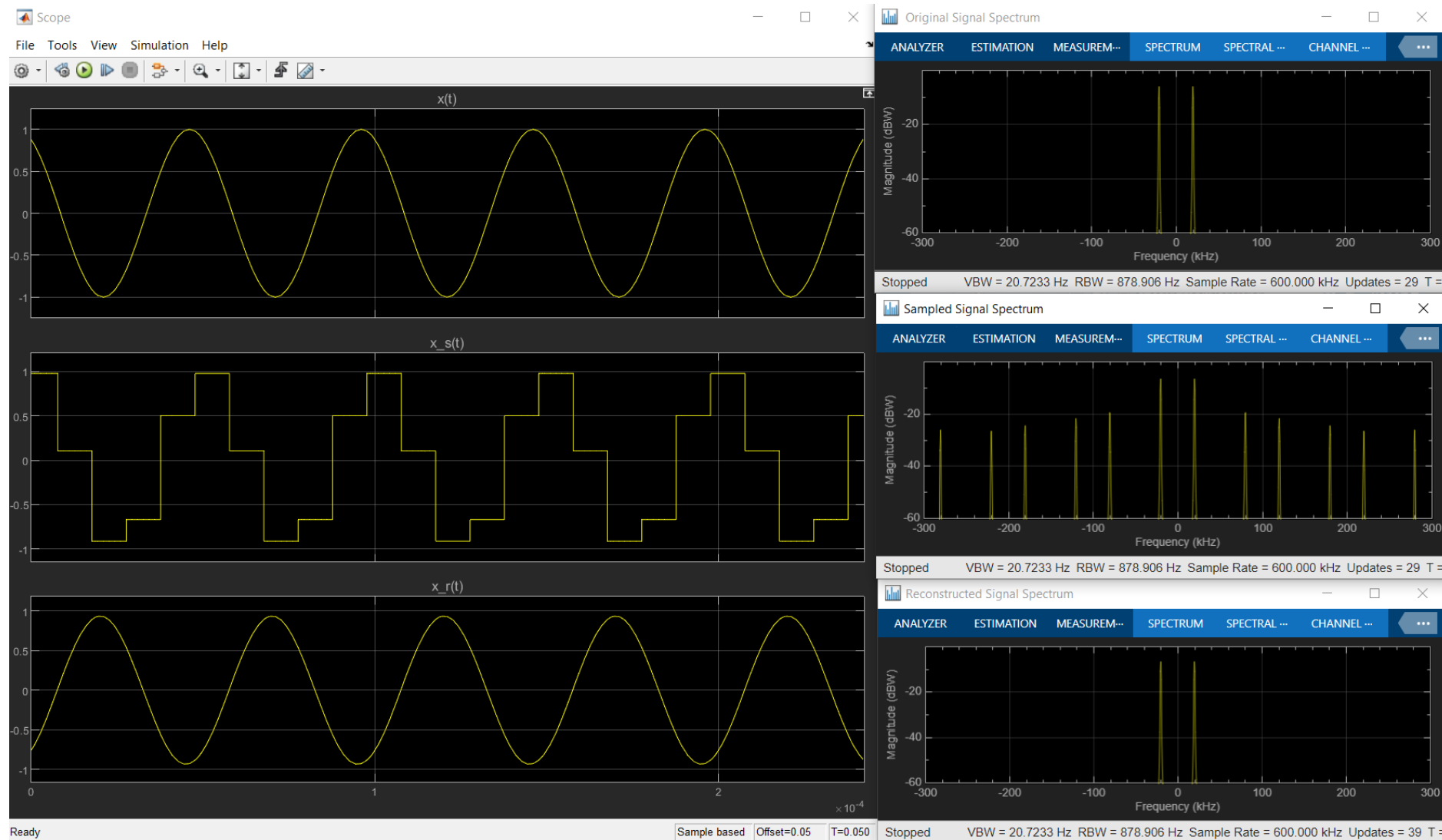


# Sample-and-hold: Sinusoidal

 sampling\_SH\_lowpass\_sinusoidal

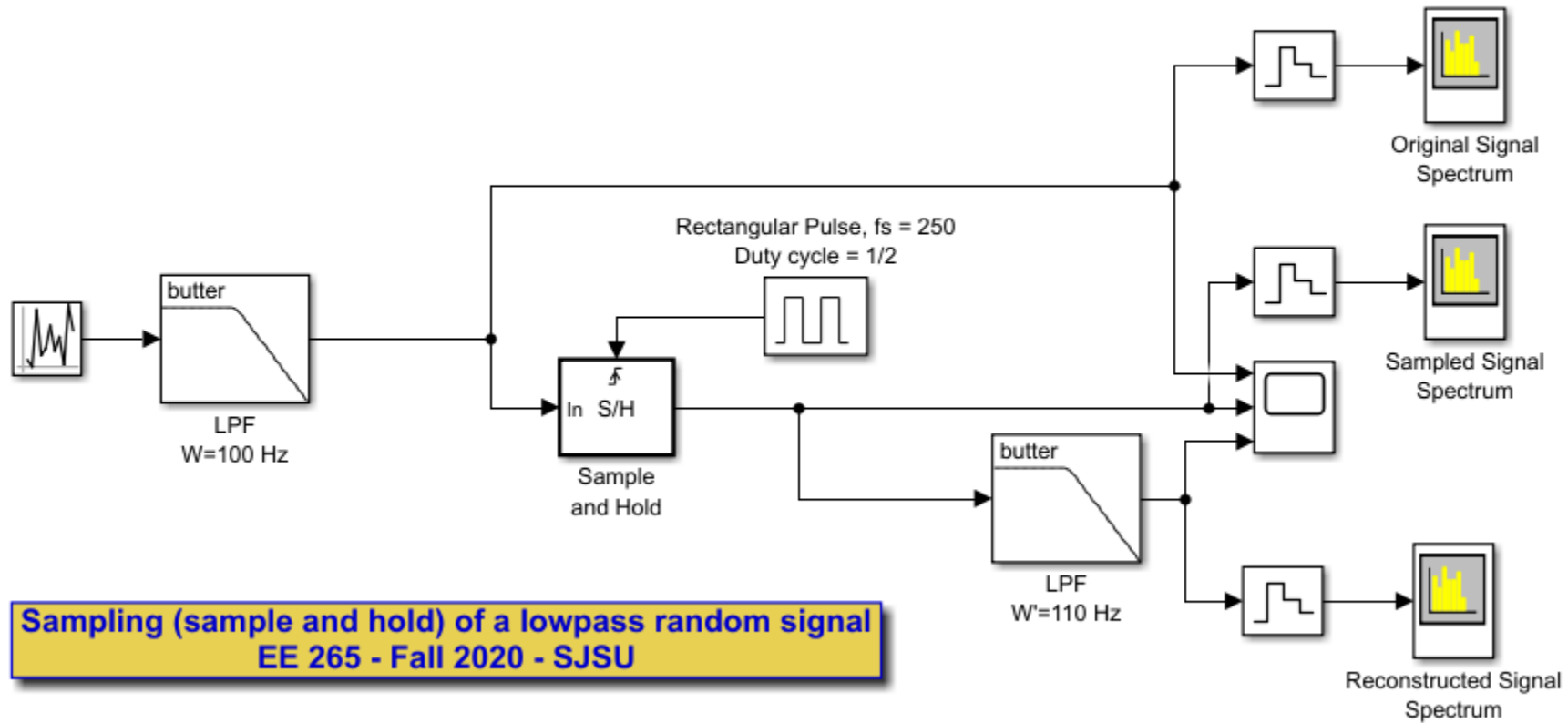


# Sample-and-hold: Sinusoidal (cont.)

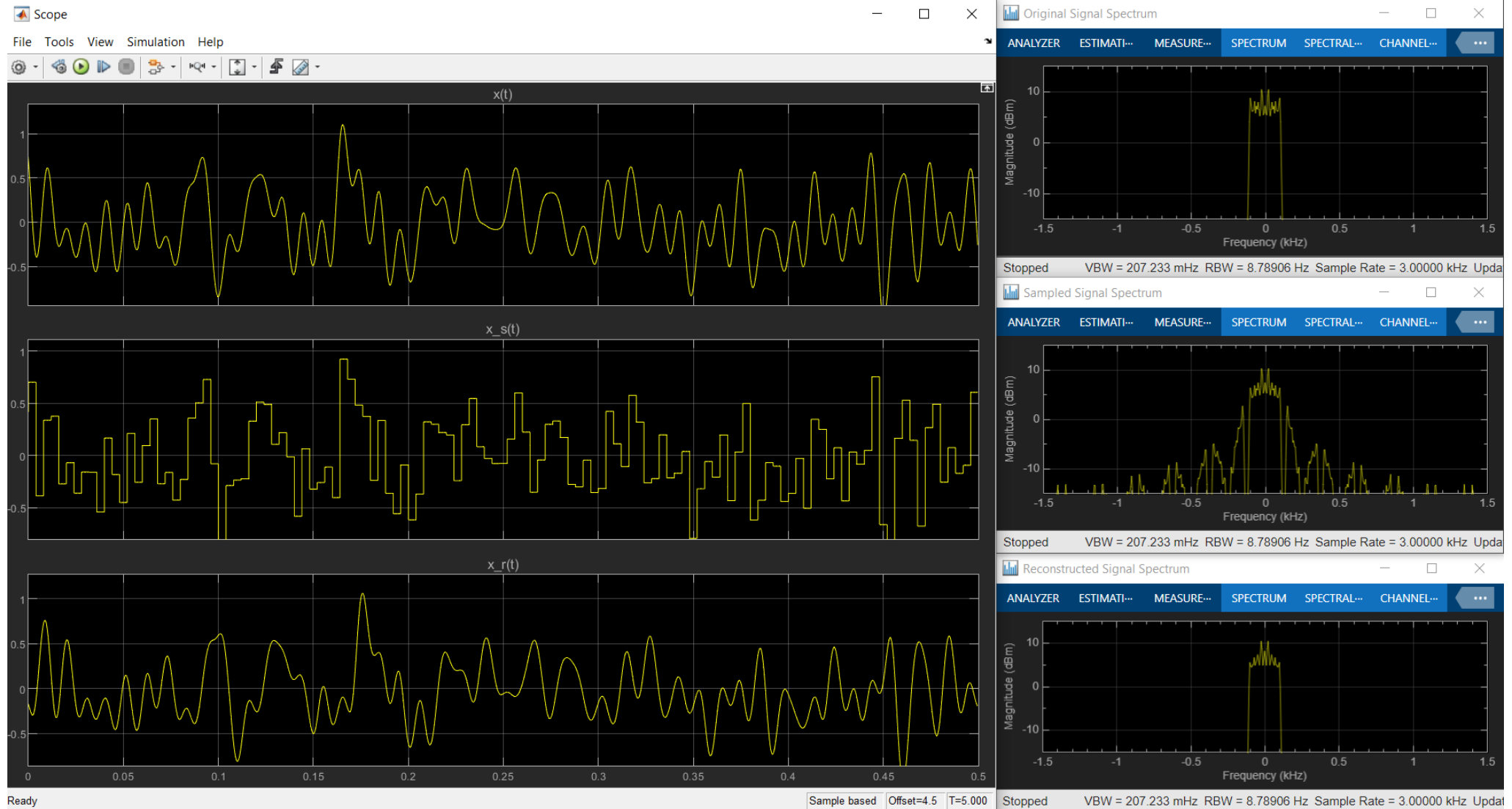


# Sample-and-hold: Lowpass signal

sampling\_SH\_lowpass



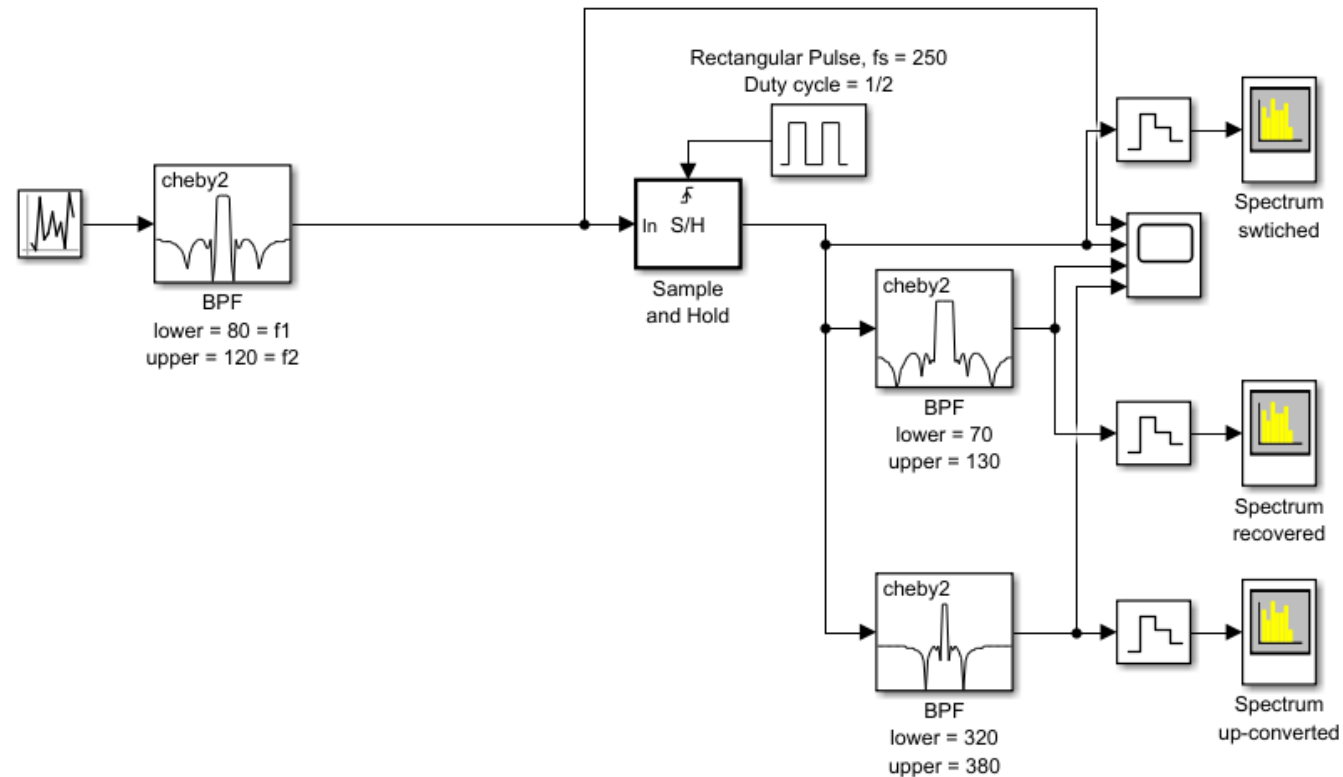
# Sample-and-hold: Lowpass signal (cont.)



# Sample-and-hold: Bandpass /Up-conversion

sampling\_SH\_bandpass

**Sampling (sample and hold) and up-conversion of a bandpass random signal**  
EE 256 - Fall 2020 - SJSU



# Sample-and-hold: Bandpass /Up-conversion (cont.)

