

ECE 4371, Fall, 2009

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Class 7

Sep. 15th, 2009

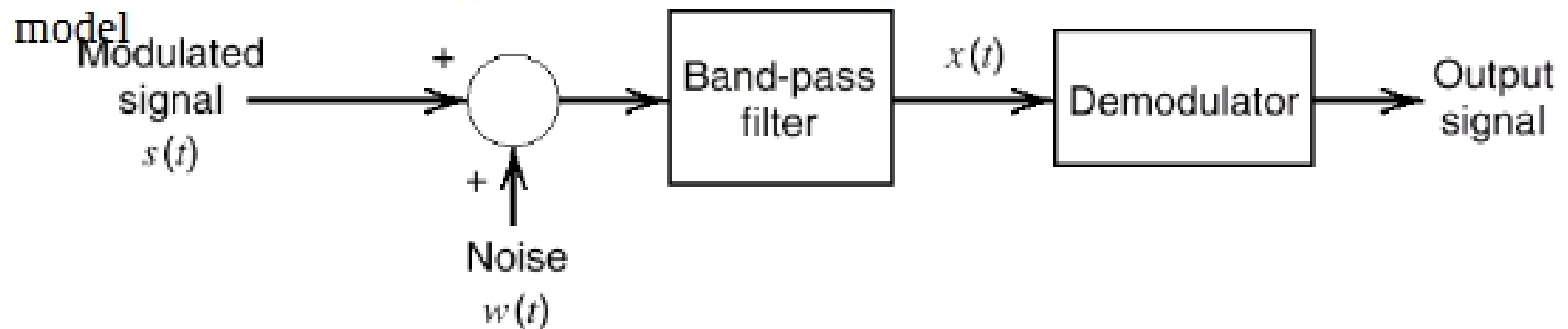
Overview

- Homework Hint
 - Signal to Noise Ratio
 - AM with noise
 - Coherent decoder
 - Non-coherent decoder
 - FM with noise
 - Analysis
 - Threshold effect
 - Preemphasis and deemphasis
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Signal to Noise Ratio

Channel model: additive white Gaussian noise (AWGN)

Receiver model: a band-pass filter followed by an ideal demodulator



- Idealized characteristic of band-pass filtered noise.
- The baseband transmission model, assuming a me calculating the channel signal-to-noise ratio.
- The PSD of $w(t)$ is denoted by

