

Advanced Digital Communications (EQ2410)

Period 3, 2016

Assignment 5

Due: Wednesday, Feb. 3, 2016

M. Xiao

Reading assignment

- Madhow, Fundamentals of Digital Communication: chapters 7.2.1, 7.2.3, and 7.2.6 (pp. 311-320, 325-329, and 336-342).

Preparation tasks

Problem 5.1: Which parameters of a convolutional code are most important for its performance?

Problem 5.2: Which steps are needed to derive the transfer function bound?

Problem 5.3: How do you construct a trellis for a convolutional code? What drives the state transitions?