

# EE482 Communication Systems II

## Lab Assignment - III<sup>†</sup>

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<sup>†</sup>Please check the due-date in the course homepage.

The bit error rate (BER) curves for binary phase shift keying (BPSK), binary amplitude shift keying (BASK), and binary frequency shift keying (BFSK), are illustrated in Fig. 1. **Utilizing MATLAB**, plot those three BER curves using the results of theoretical (mathematical) derivations. That is, directly use the derived formula for the bit error probability of those modulation schemes along with Q-function. **[Discussion]** Describe the reason that BASK and BFSK have the same BER curve, even though their modulation schemes are different from each other.

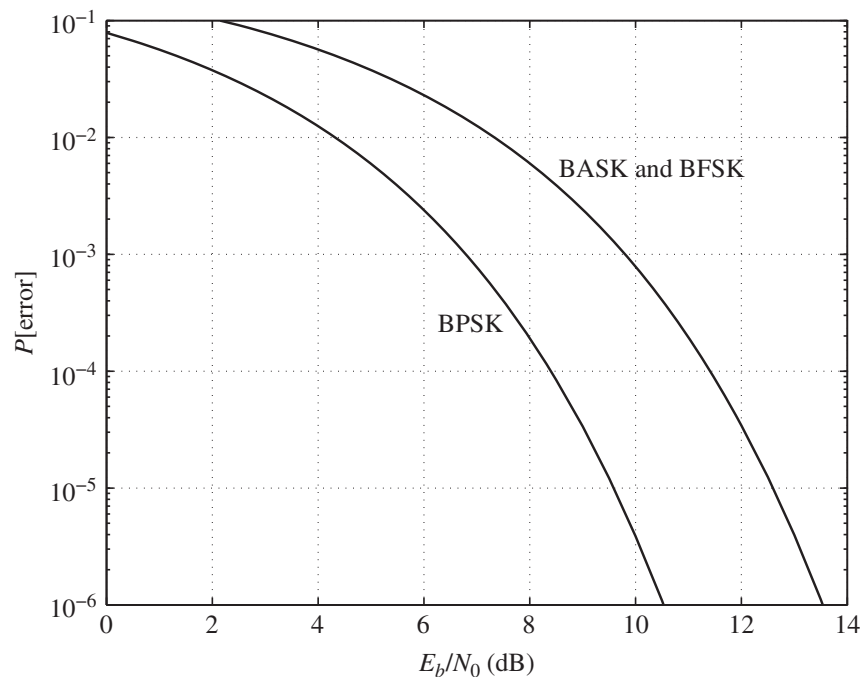


Fig. 1: Error probability curves for BPSK, BASK, and BFSK