UNC Charlotte, Department of Electrical and Computer Engineering ECGR 4101/5101, Fall 2009, Homework #7 Due: 11/2/2009, at the beginning of class (20 points)

Assignment should be typed, a hard copy turned in to instructor

- 1. (1 point) How long did this homework take you?
- 2. (15 points) From various sources available to you, contrast the following serial communications standards: RS232-C, RS423, RS422, and RS485. YOU MAY NOT COPY CONTENT FROM WEBSITES!!! Read the sources, and paraphrase the concepts. Anyone who includes text directly copied from a website will receive a zero for the assignment. List your sources of information.
- 3. (2 points) Consider a byte of data transmitted at 9600 baud with 8 data bits, 1 parity bit, 1 start bit and two stop bits, system clock of 12 Mhz. How long does the entire message (byte with overhead) take to transmit? Show your work.
- 4. (2 points) Repeat Question 3, but with a system clock of 24Mhz. Show your work.