

**UNC Charlotte, Department of Electrical and Computer Engineering**  
**ECGR3/5/6090, Fall 2003, Homework #7, Due: 10/22/03, at the beginning of class (20 points)**

1. Read the Eric Umansky article “Studs and Duds.” In four lines of correct English, summarize why Mr. Umansky believes why the Navy is better at product design than the other branches of the military. (3 points)
2. Read the Michael Gauland article “Twiddle Bits.” In four lines of correct English, summarize the general objective of the article. (3 points)
3. Write a subroutine to initialize the UART0 port for polled serial communications. Assume one stop bit, even parity, NINE data bits, LSB first, running at 1200 baud. Assume the standard setup as shown in the notes. Make sure to set ALL of the necessary control registers. Set each control register once as an entire byte. (4 points)
4. Write a subroutine to wait for data from UART0, then read it and pass it back to the calling program. Use the settings from problem 3, above. If an overflow or parity error has occurred, return 0. (10 points)