

**UNCC, Department of Electrical and Computer Engineering, ECGR4101/5101/6090,
Fall 2004, Homework #11, Due: 11/29/04, at the beginning of class (20 points)**

0. How long did this homework take you? (1 point)
1. Read the Eric Umansky article "Studs and Duds". In three sentences of correct English, summarize the general concept presented in the article. (4 points)
2. Read the Jack Ganssle article "Asynchronicity". In three sentences of correct English, summarize the general concept presented in the article. (4 points).
3. Does the SB register need to be saved in the TCB or not? Why? (1 point)
4. List three reasons why the state of a thread may be changed. (2 point)
5. For our M30262 MCU, how many threads can be in the running state? How many can be in the ready state? How many can be in the waiting state? (3 point)
6. Which of the following C variables are compiled into atomic code for the M16C architecture? (3 point)
 - a. char a;
 - b. int b;
 - c. long c;
 - d. float d;
 - e. struct {int e; char f;} e;
7. Consider the code on slide 8 of Lecture 18. What two conditions must be met during execution for this bug to be triggered? (2 points)