Assignment # 3 (DUE: WEDNESDAY, FEBRUARY 16, 2000)

SIMULATION PRINCIPLES & LANGUAGES

General principles, Monte Carlo simulation, discrete-event simulation, simulation languages, simulators, emphasis on MODSIM III

Reading #3:

- Read chapters 2, 3 and 4 of the textbook. Also read sections 7.1 and 7.2. You are responsible for all the material in these sections in addition to the material provided in class and in the Lab (except for 2.2, 4.3, and 4.5). Sections 3.2, 4.2, and 4.4 are suggested reading but optional.

Additional references (strongly suggested): Fishwick: Chapters 1, 2, 4 and 10; Law & Kelton: Chapters 1 and 3; MODSIM III manuals.

Optional reading: Fishwick Chapter 8; Law & Kelton Chapter 2;

Assignment #3:

- Do problems 2.23(b), 2.27, 3.5, 3.6, 3.7, 4.1, 4.2 (pseudo-code if you prefer, no implementation or running of the code required), 4.3.
- Do problem 4.28 from your textbook (using a computer, not manually).

Note 1: You may use MATLAB, C/C++, PASCAL, MODSIM III, or any other language you prefer, unless otherwise instructed in the problem description.

Note 2: If you need a random number generator and your package does not have one, you may use the procedure in example 8.4, p.295 in your textbook. This procedure generates random numbers $R_i$ in the interval between 0 and 2,147,483,647.