# UCF

## School of  Computer Science
## CDA 4150   Computer Architecture
## Spring  2005

**Homework 1 ( Due 2/18/05)**

1.- Implement a simulator of a vector processor with 8 vector registers, 2 pipelined functional units (Multiply, Add). Each functional unit must have 4 stages. Solve the matrix vector multiplication (use SAXPY) problem, $Ax = y$, in you vector processor simulator using chaining.

Use C or Java (C recommended).

You must turn in:

1.- A layout of the architecture.

2.- The simulation program (well documented)

3.- A complete example of a matrix vector multiplication indicating the execution time.

4.- A report explaining how the problem was solved on the vector processor.