

UCF

School of computer Science

COP 5611: Operating Systems Design Principles
Spring 2005

HW2(Due March. 29th)

1.- Write a producer consumer program using Monitors(BACI). The producer produces IORB and insert them into the I/O request queue of the device(a disk). The IORB has the track number where the data is stored in the disk. The consumer picks a IORB at a time from the I/O request queue and move the read/write head to the track indicated in the IORB and reads the data. In your solution, assume you have a disk with 300 tracks; you have to compare the average access time for the following scheduling algorithms: SCAN and SSTF.

What to deliver:

- a) A list of the IORB produced by the producer(FIFO).
- b) A list of the request in the order they are served.
- c) Show the average access time for both cases.
- d) You must show at least three different scenarios.