

COSC440 Course Outline

Week number	Lecture topics	Lab topics
1	Introduction	Installation of RPI Linux and system calls
2	Processes	The structure of a Linux kernel module
3	Interrupts	Linked list, seeking device and process sleeping
4	Character devices	Mutex, semaphore and the /proc filesystem
5	Debugging & concurrency in kernel	Memory management
6	Advanced char driver	Using ioctl()
7	Hardware and interrupt handler	Catchup lab
8	File system performance and durability	Hardware interrupt and tasklet
9	Distributed OS	Walking through Assignment 2
10	Virtualization and Security	Timer
11	Embedded OS	Demo of embedded programming
12	Report Writing	-
13	Report Writing	-