

**CS F372 TENTATIVE TUT PLAN: 1st SEM 2020-21**

1. All students are expected to have access to a working Ubuntu (20.04 LTS) set up by the second tutorial session
2. Students may follow instructions [here](https://linuxconfig.org/how-to-install-ubuntu-20-04-alongside-windows-10-dual-boot) or [here](https://www.linuxtechi.com/dual-boot-ubuntu-20-04-lts-along-with-windows-10/) to dual boot their systems. It is also fine to use a virtual installation or a standalone Ubuntu installation. Please remember to back up all your important data before trying this, because [Murphy’s law](https://en.wikipedia.org/wiki/Murphy's_law) is applicable.

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| **Week No.** | **Learning Objectives** | **Topics to be covered** |
| 1 | To familiarize ourselves with working on the Linux terminal | Common Linux Commands |
| 2 | Week No. 1 to be continued | Common Linux Commands continued |
| 3 | To familiarize ourselves with basic Linux Shell Programming | Shell Programming |
| 4 | Week No. 3 to be continued | Shell Programming continued |
| 5 | To understand Linux processes and process management | Process Management |
| 6 | To understand Inter Process communication mechanisms in Linux | Inter Process Communication & Signals |
| 7 | Week No. 6 to be continued | Inter Process Communication continued |
| 8 | To understand thread creation and management in Linux | Threads |
| 9 | To understand concurrency control mechanisms in Linux | Mutex and Semaphores |
| 10 | Week No. 9 to be continued | Mutex and Semaphores continued |
| 11 | To understand different process scheduling paradigms available in Linux | Process Scheduling |
| 12 | To understand the Linux File System | File Management |