"Linux Internals" by Anil Pugalia

+ Session 1: Introduction
    > OS Fundamentals
    > OSS & Free Software Fundamentals
    > Linux System Overview
    > Linux Usage Basics

+ Session 2: Linux Kernel Externals
    > W's of Linux Kernel
    > Kernel Source, Image & Kernel Arguments
    > Kernel Configuration & Building
    > Booting the Kernel

+ Session 3: Linux File System
    > File System Overview
    > Partitioning & Formatting
    > Case Study: ext2/ext3
    > Virtual File Systems Overview
    > File Types Supported

+ Session 4: System Calls in Linux
    > System Calls Overview
    > System Call Internals
    > Comparison with Library Functions
    > Tracing System Calls
    > System Call Examples

+ Session 5: Processes in Linux
    > Process Overview
    > Process States
    > Process Management & Schedulers
    > Process Creation, Operations & Usages

+ Session 6: Signals in Linux
    > Signal Overview
    > Signal Handling
    > Signal related Functions & Usages
    > Timers using Signals
    > Program termination & Exit Codes

+ Session 7: IPCs in Linux
    > IPC Overview
    > Pipe
    > Fifo
    > Shared Memory
    > Semaphore
    > Case Study: Client Server Modeling

+ Session 8: Threads in Linux
    > Threads Overview
    > POSIX Threads & their Internals
    > Threads Creation, Operations & Usages

+ Session 9: Synchronization in Linux
    > Synchronization Overview
    > Mutex
    > Priority Inversion & Deadlock
    > Conditional Variables
    > Read/Write Locks
    > Spin Locks
    > Barriers
    > Semaphores for Threads

+ Session 10: Linux Memory Management
    > Memory Management Overview
    > Memory Partitioning & Fragmentation
    > Paging & Segmentation
    > Virtual Addressing & Relocation
    > Physical Memory Organization
    > Swap Partition & Swapping

+ Session 11: Linux Network Management
    > Network Management Overview
    > Network Daemons & Configurations
    > Network Applications
    > Introduction to Sockets
    > Basic Socket Programming
    > I/O Multiplexing using select()

+ Session 12: Wrap Up
    > Conclusion
    > What Next?