THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

Operating Systems Laboratory

CSE 5433

Credit Hours:
3.00

Course Levels:
Undergraduate (1000-5000 level)
Graduate (5000-8000 level)

Course Components:
Lecture
Lab

Course Description:
Introduction to the internals of operating systems; designing and implementing components within commercial operating systems: system calls, CPU scheduling, context switching, process management, memory management, file systems.

Prerequisites and Co-requisites:
Prereq: 2431 or 5431.

Course Goals / Objectives:
- Master compilation and configuration of building an OS
- Master internals of OS system call implementation
- Be competent with CPU scheduling and process management
- Be competent with memory management systems
- Be competent with internals of file systems

Course Topics:
- Linux basics (Overview of Linux, Building Linux, and kernel source tree)
- Internals of system calls
- Linux CPU scheduling and process management
- Linux interrupt handling
- Linux memory management
- Linux file systems

Designation:
Elective