

OS Interface 1

- Learn OS interface before OS internal.
- Learn programming with OS system calls (the ultimate API).
- UNIX as an example

- A subset of common UNIX System calls
 - For a complete list of system calls on solaris, try “man -s 2 intro” on program.cs.fsu.edu.
 - The subset breaks down into three areas:
 - Process Management: `fork()`, `exec()`, `exit()`, `wait()`
 - InterProcess Communication (IPC): `pipe()`, `signal()`.
 - File and I/O System calls: `open()`, `creat()`, `read()`, `write()`, `lseek()`, `close()`, `unlink()`, `dup()`, and `stat()`
 - A good reference book:
 - W. Richard Stevens, “Advanced Programming in the UNIX environment,” Addison-Wesley.

Process management

- Examining processes in UNIX
 - The `ps` command displays standard process attributes.
 - `/proc` directory contains more information
 - `top`, `vmstat` commands examine CPU and memory usage statistics.