Unix High-Level Overview

- User interaction with Unix
- Useful Unix Command Categories
- The Shell
- For further information

User Interaction with Unix

System Utilities
- Programs to run application programs, manipulate files and text, manage resources, etc.

C Library
- Higher-level access to OS resources; useful routines for e.g., string handling, and math

Kernel
- Low-level ("direct") access to OS resources including filesystem, IPC, memory management, and networking

System Interface
- User interaction with Unix

Useful Unix Command Categories

- File manipulation
  - cp, mv, rm, ls -al, less

- Text processing
  - grep, egrep, sed, perl

- Process management
  - top, ps -lu your login name

- Shared resource management
  - ipcs
The Shell

- The shell is the user's interface to the system
  - job control – start/stop/kill processes
  - variables and aliases – customize a user's shell interface
  - command history and substitution – view/repeat/modify previous commands
- csh and tcs
  - Convenient for C/C++ programmers, but flakey
    http://www.mars.org/home/rob/docs/csh-whynot.html
- GNU bash
  - fast, powerful, widely available

For Further Information

- man pages
  - man -k topic
- info, if you have added pkg gnu (or on Linux)
- man intro often has useful information