Slide 1

Administrivia

- Things to note in the syllabus:
  - My office hours and e-mail address.
  - Course Web page (especially schedule).
  - Requirements and grading.
  - Policies on late work and academic integrity.
  - (Yes, the room under "Class meeting times and location" is wrong.)
- Bookstore should have (some) copies of the textbook.
- Lab setup: Three machines in HAS 200, plus a router.
- First assignment(s) on Web soon, to include forming groups and installing FC2 on our lab machines.

Slide 2

A Few Words of Caution

- In this course you will probably find out how to do some things that you should not do (e.g., attempt to gain root access to one of the regular lab machines).
- The department's security policies are based on the idea that we're an academic community and can trust each other. In case you're tempted, however, be advised that Trinity's Code of Ethics for Computing specifically disallows attempting "to gain access to computing resources for which you are not authorized."
- So, remember to use the powers you gain only for good . . .

Slide 3

Review: Reading The Fine Manuals

- One of the most useful things you can learn is how to learn more. Documentation on UNIX systems is not always perfect, and it's not particularly novice-friendly, but usually it's thorough.
- Places to look:
  - `man` pages. Organized into "sections" (user commands, sysadmin commands, library functions, etc.). `apropos` or `man -k` are useful.
  - `info` pages.
  - Elsewhere on the system. `locate` on Linux may help.
  - The Web, via your favorite search engine.
  - Usenet, including Google's archives (click "Groups" from Google's main page).

Slide 4

Semi-Review: Processes

- "Process" — one of a collection of concurrently-executing entities. Used to model user/application programs and also (wherever feasible) system activities.
- Some useful process-related commands:
  - `ps`
  - `kill`
  - `nice` and `renice`
  - `top`

Slide 5

Semi-Review: Files and Filesystems

- "Filesystem" — another key abstraction provided by operating system, so that user/application programs can deal with I/O devices in a "nice" way.
- Main components:
  - Namespace.
  - API.
  - Security model.
  - Implementation.

Slide 6

Files and Filesystems — Key Concepts

- Absolute and relative pathnames (`ls`, `cd`, etc.).
- Mounting and unmounting files (`mount`, `umount`).
- Different types of files ("everything's a file").
- Hard links versus symbolic links (`ln`).
- File attributes — ownership, permissions and other bits (`chmod`, `chown`, `chgrp`, `umask`).

Slide 7

Minute Essay

- What are your goals for this course?
- What background, if any, do you have in installing and administering Linux/Unix? other operating systems?
- Have you taken the operating systems course?
- Anything else you want to tell me? about the course, what you did this summer, . . . ?