Administrivia

- Homework 9 due this Friday.
- Attendance report updated (and uploaded). Not too late to get credit for any days missed; watch the recorded lecture and send me a minute-essay response.

Slide 1

- Final deadline for turning in any late or missed work a week from Wednesday.
- (Grade status update.)
- Office hours this week and next TBA (in e-mail). Also e-mail is usually a good way to reach me.
- No, this hasn't been a good semester for me, and I really regret that.

Course Wrap-Up — What I Hope You Got From This Class (Details)

- More things in your "bag of tricks" (see later slide).
- Practice in reading man pages and otherwise learning more.

Slide 2

• Exposure to traditional tools you might need, or want, to use sometime. You might not remember details, but I hope you now have a better sense of what's available and can (re)learn if/when you need to. (Also exposure reduces the intimidation factor?)

Course Wrap-Up — What I Hope You Got From This Class (Big Picture)

 Exposure to a different operating system / user interface paradigm — many small programs that work together, information kept in text files, emphasis on being expert-friendly and scriptable, etc.

"A tour of UNIXworld / TextWorld."

"More than one way to do things."

Course Wrap-Up — What I Hope You Got From This Class (Big Picture), Continued

• Encouragement to find out how to use all your tools as intelligently as possible.

I like the old tools because I know how to make them work together. But it's worth noting that many "modern" tools (GUI-based programs, graphical file managers, etc.) have their own way of working together — common set of keybindings, cut-and-paste metaphor, drag-and-drop, multiple selections, etc. Compare and contrast!

Also sometimes cloud-based tools have so-called APIs that allow for scripting.

Slide 4

Slide 3

Course Wrap-Up — Topics

 Shell features — command history, redirecting input and output, scripting features (if/then/else and loops).

- Pipes.
- Filter programs (awk, sed, grep, etc.).
- Text editors.
- MTEX.
- make and makefiles.
- Regular expressions (for text editing, grep, etc.).
- Miscellaneous other text-mode tools mail, screen, etc., etc.
- A little about installing software and shared libraries.

From First Lecture — Shameless Evangelism/Ranting

- "UNIX is obsolete history goes back to 1969!"
 You can fix a lot of bugs in 50+ years, and the odds are better that what you learn will still be useful years from now.
- "It's not user-friendly!"
 Sure it is; it's just choosy about its friends. Designed by programmers for programmers "expert-friendly" as opposed to "novice-friendly."
- "Everyone knows GUIs are better!"
 For some things and some people, maybe so. But which is more expressive, pointing and gesturing or speech?
- (You don't have to agree with me! but in theory now you have more information on which to base an opinion.)

Slide 6

From First Lecture — The UNIX Philosophy

• As stated by one of its developers (Doug McIlroy):

"Write programs that do one thing and do it well. Write programs to work together. Write programs to handle text streams, because that is a universal interface."

Slide 7

• There's more, but the emphasis is on (1) providing a set of lightweight tools that can be put together to do interesting things, and (2) providing choices to users (sometimes almost too many!)

Minute Essay

- For office hours I'm thinking most days 6pm to 7pm. Does that time work for you? (Likely irrelevant for this course, but maybe?)
- Parting remarks? (You might not have any.)
- Course evaluations:

URL sent to you in e-mail.

Password TBA in class (to also be sent by e-mail after class).

• And best wishes for a successful end of semester and a good holiday!

Slide 8