Slide 1

Administrivia

- Reminder: Homework 10 due today.
- Reminder (as if you needed one!): Final next Tuesday. Review sheet on the Web.
- I will send out a "grade summary", similar to what I sent out at midsemester, as soon as I get more caught up with grading. (Apologies for the delays!)
- I could make up a set of extra-credit problems if there's interest. They could only help your grade, and would be due next Wednesday. (How it would work: Any points would be added to the "your points" score without changing the "total points".)

  (I'll ask about that in the minute essay.)

Slide 2

More Administrivia

- Solutions to all quizzes online; sample solutions to some homeworks. I'll post sample solutions to other homeworks soon.
- My office hours this week — I'm not quite sure. I should be around Wednesday and late Friday; I'll let you know when by e-mail.

Slide 3

Exam Review

- (Topic by topic through review sheet, briefly.)
- FYI, I will not ask about sorting algorithms.
- (More about pointers and `malloc`?)

Slide 4

Course Recap

- Course is an "introduction to programming."
- Ideally, a first course would focus more on ideas of programming than details — except that, in the words of a colleague

  "Programming is not a spectator sport."

  so we have to choose a programming language, and an environment, and then it's difficult *not* to get caught up in the details.

Slide 5

Course Recap, Continued

- Course intended as introduction to programming for students majoring in Engineering Science, taught in a language acceptable to the department. Exposure to Linux command-line environment considered a plus.
- Choice of examples and assignments meant to slant toward those of use in STEM field.
- Some material normally covered in a first course for majors omitted/skimmed.

Slide 6

What I Hope You Got From This Course

- A basic understanding of what programming is — expressing a problem and its solution as "an algorithm" and turning that into code.

  In particular I tried to make at least some assignments not-totally-trivial, to give a sense of what you can do with programming skills.
- A basic knowledge of C and its quirks.
- Exposure to Linux command-line tools, including `gnuplot`.

Slide 7

"Why C?", Revisited

- C would not be most people's choice as a beginning language — must learn both programming basics in general and C quirks. (But our department used it in CS1 at one time!)
- But traditionally it's a "universal language" with implementations on pretty much every platform (though that may be changing?). So you may need it at some point, particularly for "embedded systems" work.

Slide 8

"Why Not C"

- On many occasions I've mentioned "more-recent languages" as being easier to use, safer, etc. Also many of them include extensive standard libraries that support GUIs, graphics, networking, etc., etc.
- In my thinking, for general-purpose/application programs one of these is the way to go. Popular choices include C++, Java, and Python (particularly the latter, for people outside CS). We like Scala but it is not (yet?) as widely-used.
- Does that mean it was useless to learn C? I say no! good to have in your "bag of tricks", and once you know *one* programming language, the next is easier, and the one after that is easier still . . .

Slide 9

Minute Essay

- Would you be interested in doing extra-credit problems?
- Anything noteworthy about Homework 10?
- And best wishes for a successful end of semester and a good holiday!