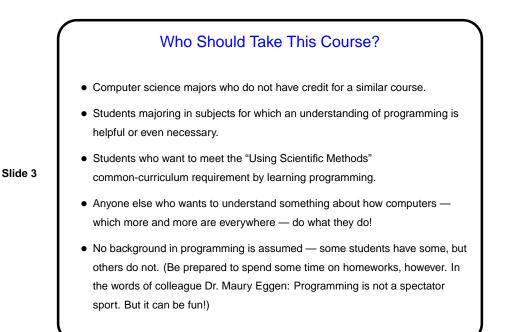


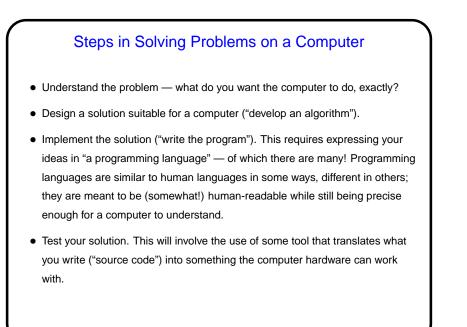
## What Is This Course About? It's an introductory course in programming, with a focus on problem-solving and logic. (It also includes an introduction to Linux and some of its command-line tools, though that's somewhat secondary.) "Programming" — ? solving problems with computers, which requires expressing ideas in a way the computer can understand.



## Solving Problems on Computers

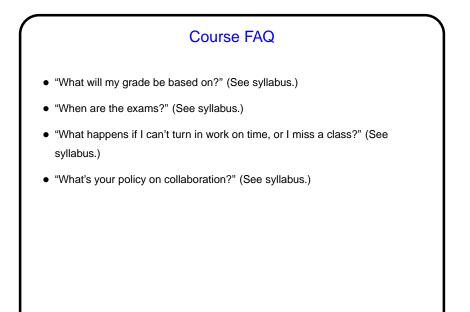
• Appearances (maybe?) to the contrary, computers are not smart. What they do well is perform sequences of simple math/logic operations very fast and very accurately.

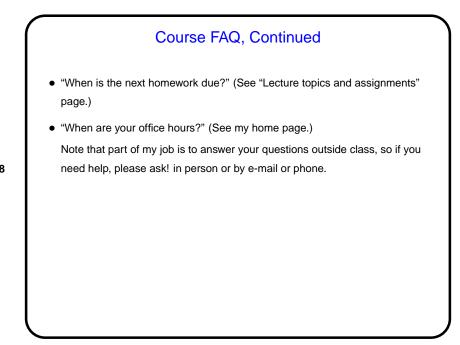
- What makes them useful is that people have figured out how to break complicated tasks down into sequences of simple operations — i.e., how to "program" them.
- This requires a mindset not quite like that required for any other activity and can involve a lot of creativity.
- It also involves a form of experimentation (which is why this course meets the CC requirement it does).

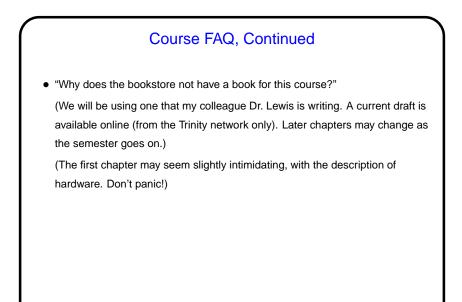


## Solving Problems on a Computer, Continued

- The overall process understand the problem, develop and test a solution is mostly independent of the choice of programming language and platform (combination of hardware and operating system, roughly). So once you understand the principles it is relatively easy to learn new languages.
- Opinions about which language to learn first, and on what platform, vary. Right now different sections of this course use different languages but the same platform (Linux). In this section we will use Scala; it is somewhat easier for beginners than some of the other choices but also powerful enough to write interesting programs.





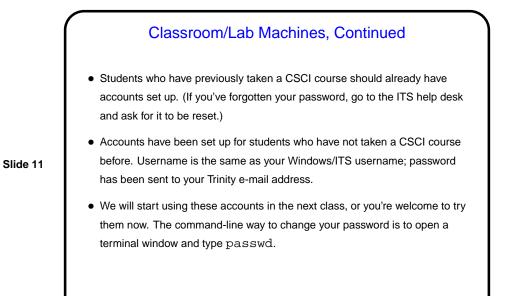


## Classroom/Lab Machines

Trinity's ITS department provides computing facilities for general use. We
maintain our own set of computers tailored to the needs of our department
(courses and research). Probably the easiest (though not the only) option for
doing the assignments is to use these machines.

Slide 10

• To access these computers you need an "account" separate from your main Trinity account . . .



Classroom/Lab Machines, Continued

 Most of the department's computers live in three classrooms (HAS 227, HAS 228, HAS 340) and two labs (HAS 200, HAS 329). (The others are servers, in ITS's server room.)

You should have physical access (via your TigerCard) to all of the classrooms and labs any time the building is open. HAS 340 is Linux-only, but the machines in the other rooms dual-boot Linux and Windows.

• You can also access of these machines from other computers on campus (we will talk later about how), provided the computer you want to access is running Linux.

