Slide 1

Administrivia

- One purpose of the syllabus is to spell out policies (next slides).
- Most other information will be on the Web, either on my home page (here, office hours) or the course Web page (here).

  A request: If you spot something wrong with course material on the Web, please let me know!

Slide 2

Course FAQ

- "What will my grade be based on?" (See syllabus.)
- "When are the exams?" (There aren't any, but there are scheduled things you need to be present for. See syllabus.)
- "What happens if I can't turn in work on time, or I miss a class?" (See syllabus.)
- "What's your policy on collaboration?" (See syllabus.)

Slide 3

Course FAQ, Continued

- "When is the next assignment due?" (See "Lecture topics and assignments" page.)
- "When are your office hours?" (See my home page.)

  Note that part of my job is to answer your questions outside class, so if you need help, please ask! in person or by e-mail or phone. Some office hours will be "open lab" (times TBA). At those times I'll be in one of the classrooms/labs ready to answer questions.

Slide 4

Why Are Design Skills Important?

- Large (i.e., "interesting"?) programming projects more or less require good design to have much hope of succeeding.
- Even if you don't plan to program for a living, the ability to analyze a problem and think about how it could be solved using computer systems is a valuable skill. We think this kind of analysis and design work is relatively difficult to "outsource".
- Hence this course. You'll work in groups of four to five students (group assignments listed in the project description), and each group will design a solution to a semi-real-world problem . . .

Slide 5

Design Project — Introduction

- A perennial problem for our department is scheduling classes in available rooms, because there are lots of constraints to satisfy:
  - Obvious ones — two classes can't meet in the same room at the same time, one person can't teach two classes at the same time.
  - Less obvious ones — don't want to schedule two classes likely to have overlapping enrollments at the same time, some classes may need equipment/software only available in one room. Might even want to consider instructor's scheduling preferences (e.g., Dr. Pitts wants T/R classes only).
- Your mission for this course is to design a system to help with this problem. (Ideally, it will generalize to other similar problems.)

Slide 6

Design Project — Requirements and Constraints

- You have some flexibility in deciding exactly what functionality to provide — that's part of the design problem. Real-world problems usually have a "customer", and part of the design problem is figuring out what he/she wants. I'll play that role in this project.
- You also have the following constraints:
  - Your solution should be as cross-platform and portable as possible — i.e., users should not be constrained to a particular platform.
  - Your solution should not require spending money — e.g., if you use existing products/programs, they must be public-domain / free.

Slide 7

Design Project — Major Phases

- First you need to think through what functionality your solution needs to provide, ultimately producing a UML use-case analysis.
- You will then design an implementation of this functionality and code a prototype. The prototype should focus on showing how your environment would look to a user; you can "fake" parts that are hidden if you have to (though the more real functionality you provide, the better your grade will be).

Slide 8

To Do Today

- Complete minute essay (next slide).
- Choose group leaders (each group should meet, choose a leader, and tell me the choice by e-mail).

Slide 9

Minute Essay

- What are your goals for this course?
- Tell me about your coursework in CS so far — list courses taken, courses this semester.