### **CS225**

# Data Structures and Software Principles

### Introductions:

Us: Cinda Heeren - CS PhD, 2004, UIUC

Research interests: data mining, computational geometry, computer science education.

More recently: new course "Visualizing Literature", newer course cs126, even newer course cs205.

Mattox Beckman - CS PhD, 2003, UIUC

Research interests: programming languages, computer science education.

Teaching: faculty at IIT.

Course staff:

You:

# All you need to know is here:

http://cs.illinois.edu/class/cs225

### Info on:

- Staff
- Communications
- Lab sections
- MPs
- Exams
- Grading
- Academic Integrity

## Today's announcements:

HW0 available by 5p, due 8/28, in class AND svn.

MP1 available soon, due 9/1, 11:59p.

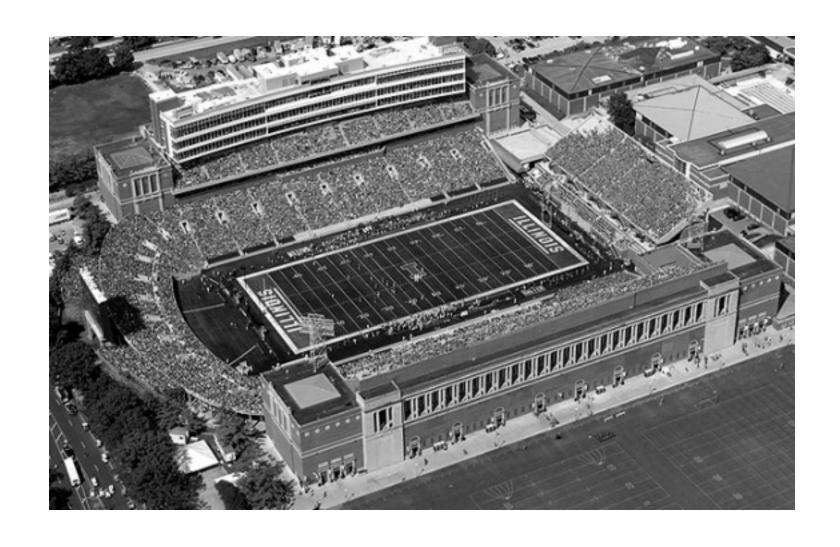
Classes cancelled 9/1—Labor Day!

DYB (Debug your brain):

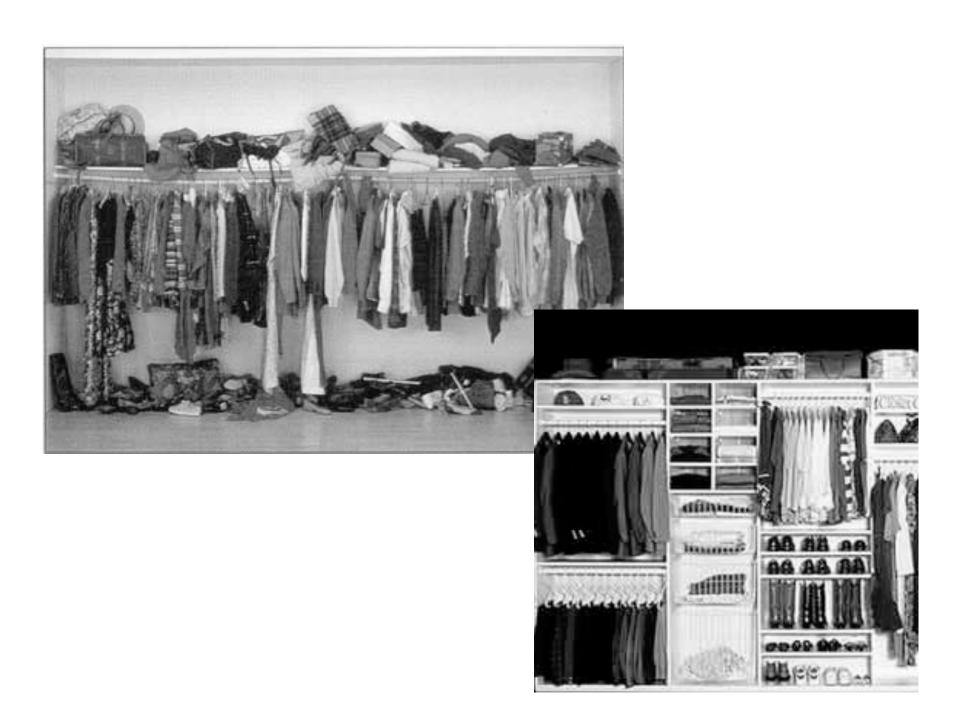
Every MWF, 12-2p, at ECEB lobby for now

Sections DO meet this week (and are very important).

### What's this course about?



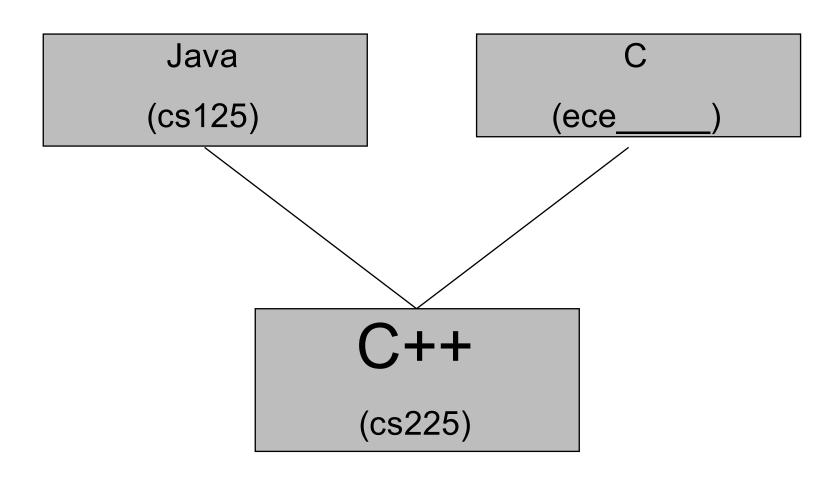
Where's Tom Bogue?



### What's this course like?

- A programming and "thinking" course
  - Not an easy course
  - Expect to work hard
- A fundamental computer science course
  - Must know if you claim to be a computer scientist
  - Must know if you want to be a good programmer and designer
  - Essential for many follow up courses

### Where did you come from?



#### Classes in C++:

Every variable has \_\_\_\_\_, \_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

### Primitive types:

```
int myFavoInt;
char rating = 'E';
double u = 37.;
```

#### User defined types:

```
sphere myFavoSphere;
is a group of and
```

#### Structure of a class defn:

how do we implement sphere myFavoSphere; ?

```
class sphere{
//member declarations
```

sphere member function definitions.

#### Structure of a class defn (cont):

```
class sphere{
public:
private:
```

```
sphere representation:
```

```
sphere functionality:
```

- 1.
- 2.
- 3.

```
int main() {
};
```

### Class Definition... where are we?

