



# CS 225

**Data Structures**

# Introduction

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**Academic Interests:** data discovery/visualization, systems programming, education worth sharing, and magic fairy dust

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**Academic Interests:**

Course Staff:

You:

# Everything about CS 225

<https://courses.engr.illinois.edu/cs225/fa2017/>

## **Information on:**

Staff

Communications

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MPs

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What is this course about?





ECE 220

CS 126

CS 125

CS 225

CS 173

MATH 213

# Variables in C++

```
int myFavoriteInt;
```

```
char grade = 'A';
```

```
double gamma = 0.653;
```

```
Cat fiona, mia;
```

```
Cube rubix;
```

```
Person wade;
```



# Encapsulation



# Encapsulation

`sphere.h`

`sphere.cpp`

```
1 #ifndef SPHERE_H           sphere.h
2 #define SPHERE_H
3
4 class Sphere {
5     public:
6
7
8
9
10
11
12     private:
13
14
15 };
16
17 #endif
18
19
20
```

## sphere.cpp

```
1 #include "sphere.h"
2
3 double Sphere::getRadius() {
4
5
6 }
7
8
9
10
11
12
13
14
15
16
17
18
19
20
```

## sphere.h

```
4 class Sphere {
5     public:
6         double getRadius();
```