

classes

## Class Course

java.lang.Object  
    classes.Course

All Implemented Interfaces:

java.lang.Comparable<Course>

```
public class Course
extends java.lang.Object
implements java.lang.Comparable<Course>
```

Data object to represent a CS course.

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### Field Summary

Fields

Modifier and Type	Field and Description
private int	<b>gradHours</b> The number of grad hours this course is worth.
private java.util.List<Instructor>	<b>instructors</b> An ArrayList of instructors that teach this course.
private java.lang.String	<b>name</b> Official title of course.
private int	<b>number</b> Course number.
private int	<b>underGradHours</b> The number of undergrad hours this course is worth.

### Constructor Summary

Constructors

Constructor and Description
<b>Course</b> ( ) Just a regular old constructor.

## Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type	Method and Description	
void	<code>addInstructor(Instructor dude)</code>	Adds an instructor to this course's list of instructors.
<code>Instructor</code>	<code>chooseInstructor()</code>	Determines a random instructor to teach this course, chosen from the ArrayList instructors field.
int	<code>compareTo(Course c)</code>	For sorting an ArrayList of courses by their course number.
java.lang.String	<code>fileBlock()</code>	Creates a nice, readable plaintext representation of this object's attributes.
int	<code>getGradHours()</code>	Standard getter.
java.lang.String	<code>getName()</code>	Standard getter.
int	<code>getNumber()</code>	Standard getter.
int	<code>getUnderGradHours()</code>	Standard getter.
boolean	<code>hasInstructor(Instructor dude)</code>	Determines whether or not the given instructor is already in the list.
void	<code>setGradHours(int gradHours)</code>	Standard setter.
void	<code>setName(java.lang.String name)</code>	Standard setter.
void	<code>setNumber(int number)</code>	Standard setter.
void	<code>setUnderGradHours(int underGradHours)</code>	Standard setter.
java.lang.String	<code>toString()</code>	Standard toString method.
java.lang.String	<code>tsvLine()</code>	Creates a single-line TSV style representation of this object's data.

### Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

## Field Detail

### name

```
private java.lang.String name
```

Official title of course.

### number

```
private int number
```

Course number.

### underGradHours

```
private int underGradHours
```

The number of undergrad hours this course is worth.

### gradHours

```
private int gradHours
```

The number of grad hours this course is worth.

### instructors

```
private java.util.List<Instructor> instructors
```

An ArrayList of instructors that teach this course.

## Constructor Detail

### Course

```
public Course()
```

Just a regular old constructor.

## Method Detail

### chooseInstructor

```
public Instructor chooseInstructor()
```

Determines a random instructor to teach this course, chosen from the ArrayList instructors field.

**Returns:**

An instructor object.

**addInstructor**

```
public void addInstructor(Instructor dude)
```

Adds an instructor to this course's list of instructors.

**Parameters:**

dude - The instructor to add to this course.

**hasInstructor**

```
public boolean hasInstructor(Instructor dude)
```

Determines whether or not the given instructor is already in the list. This way, he/she can't be added twice.

**Parameters:**

dude - The instructor to check.

**Returns:**

A boolean indicating whether or not the list contains the given instructor.

**fileBlock**

```
public java.lang.String fileBlock()
```

Creates a nice, readable plaintext representation of this object's attributes.

**Returns:**

A string of plaintext containing this object's attributes.

**tsvLine**

```
public java.lang.String tsvLine()
```

Creates a single-line TSV style representation of this object's data.

**Returns:**

A single TSV line.

**toString**

```
public java.lang.String toString()
```

Standard toString method.

**Overrides:**

toString in class java.lang.Object

### getName

```
public java.lang.String getName()
```

Standard getter.

**Returns:**

The name of this course.

### setName

```
public void setName(java.lang.String name)
```

Standard setter.

**Parameters:**

name - A string to set as this course's name.

### getNumber

```
public int getNumber()
```

Standard getter.

**Returns:**

The number of this course.

### setNumber

```
public void setNumber(int number)
```

Standard setter.

**Parameters:**

number - An int to set as this course's number.

### getUnderGradHours

```
public int getUnderGradHours()
```

Standard getter.

**Returns:**

The number of undergrad hours this course has.

### setUnderGradHours

```
public void setUnderGradHours(int underGradHours)
```

Standard setter.

**Parameters:**

`underGradHours` - An int to set as this course's number of undergrad hours.

### **getGradHours**

```
public int getGradHours()
```

Standard getter.

**Returns:**

The number of grad hours this course has.

### **setGradHours**

```
public void setGradHours(int gradHours)
```

Standard setter.

**Parameters:**

`gradHours` - An int to set as this course's number of grad hours.

### **compareTo**

```
public int compareTo(Course c)
```

For sorting an ArrayList of courses by their course number.

**Specified by:**

`compareTo` in interface [java.lang.Comparable<Course>](#)

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