

CSCI 136:  
Data Structures  
and  
Advanced Programming  
Lecture 4  
Java Crash Course  
Instructor: Dan Barowy  
**Williams**

## Outline

Study tip  
Program design (continued)  
Class syntax  
git  
Generics (tease)

## Life skill #4

Confusion is not necessarily a bad thing.



## Life skill #4

### **Sometimes Confusion is a Good Thing**

Tania Lombrozo  
NPR, December 14, 2015

“Students **who were confused** ... as reflected in inconsistent responses on subsequent questions ... **ultimately did better** on a final test assessing whether they learned the key points from the lessons.”

## Life skill #4

### Sometimes Confusion is a Good Thing

Tania Lombrozo  
NPR, December 14, 2015

“... [C]onfusion is itself a step toward learning — an experience that motivates the learner to reconcile an inconsistency or remedy some deficit. In this view, confusion isn't just a side effect of beneficial cognitive processes, but a beneficial process itself. ... [T]here's evidence that experiencing difficulties in learning can sometimes be desirable, leading to deeper processing and better long-term memory.”

<https://www.npr.org/sections/13.7/2015/12/14/459651340/sometimes-confusion-is-a-good-thing>

## Life skill #4

Confusion is not necessarily a bad thing.



It is a signal that you are  
not confident in your knowledge.

Use this signal to guide your study (i.e.: glossary).

Last day of drop/add is today



WordSeq class

Q: How might we **represent** a **sequence of words** using a **class**?

See website for posted code.

**One way** to get familiar with Java:

**retype** the code!

How I organize a **class**

```
class Foo {  
  1  /* INSTANCE VARIABLES */  
    int bar;    // number of foos  
    String baz; // foo name  
  
  2  /* CONSTRUCTOR */  
    public Foo() { ... }  
  
  3  /* INSTANCE METHODS */  
    public int getBar() { ... }  
    public void setBar(int b) { ... }  
  
  4  /* STATIC METHODS */  
    public static void main(...) {...}  
}
```

Let's start with **git**

## Recap & Next Class

### Today we learned:

- More Java
  - Class syntax
- git

### Next class:

- Generics
- Version control
- Generics