

# Introduction

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## 1 Administrivia

### Announcements

### Assignment

Read Chapter 1.

### Outline

1. Syllabus
2. Three big concepts.
3. Online survey.
4. Exercise.

### Coming Up

First lab.

## 2 Syllabus

1. Personal home page, office hours, class time.
2. Objectives: Introduction to CS, OOP in Java, program and algorithm development.
3. Course points:
  - (a) Labs and assignments: Labs, partners. Post-lab assignments, individually. Late work. Toolbox. Workload.
  - (b) Online CS toolbox.
  - (c) Quizzes: Six scheduled. Beginning of class. Lowest score dropped. No make-ups.
  - (d) Exams: Two. Make-ups with good reason.
  - (e) Final. Cumulative. Scheduled by registrar.
4. Course home page: Items of general interest, labs, solutions, meeting outlines.
5. Check your Goucher e-mail.
6. Distractions: cell phones, private discussions.
7. Attendance: participation is an essential part of the learning process. Readiness: Assigned readings expectation. Integrity: Honor code.

Come to class prepared to work and experiment!

## 3 Three Big Concepts

1. An *object* is an entity that contains data and its own methods for manipulating that data.
2. A *class* is a collection of objects. The class definition provides a prototype for all of its objects (**abstraction**).

3. A class can *inherit* all or most of its definition from another class (**reuse**). In Java we say that a class extends another and objects in the extended class will inherit the data and methods from the original class plus will probably have additional data and/or methods.

### 3.1 Creation and Use

1. Creating an Object (**binding**).

The constructor for a class has the same name as the class. We create an object as follows:

```
ClassName objectName = new ClassName(argument list);
```

2. Using an object.

We use the methods of an object as follows:

```
objectName.methodName(actual arguments);
```

## 4 Online Survey

See class home page.

## 5 Exercise

Refer to handout.