### ../../../../../../Volumes/DataCard/Repos/CS235AM-CourseMaterials/Images/android_

### What do you need to already know and be able to apply to succeed in this class?

### Basic Principles of Object Oriented Programming

### Polymorphism

### Inheritance

### Encapsulation

### Intermediate Java Language Features

* Interfaces
* Abstract classes
* Overriding base class methods
* Generics
* Collections (especially the List and HashMap classes)
* Annotations

Best Practices for Software Development

* DRY (Don’t Repeat Yourself) code  
  Don’t copy and paste blocks of code
* Separation of concerns  
  For example, use separate modules for:
  + UI (User Interface)
  + Business logic (computation)
  + Data manipulation (back-end)
* Highly cohesive, loosely coupled
  + Classes should have a single responsibility
  + Each method should do just one thing
  + Public APIs should be minimal (only what is really needed)
* Programming style
  + Use meaningful names
  + Write comments that explain “why”
  + Follow the style conventions of the community in which you are working