

Object-Oriented Principles for CSSE220

1. Structure your program **around the data** that needs storing
 - a. Nouns become your classes, operations become their methods

2. Your structure needs to **function correctly**
 - a. Every class must have access (directly or indirectly) to the data it needs to complete its operations
 - b. Usually this means the problem must be modeled correctly
 - c. Data should also not be duplicated

3. Functionality should be **spread** throughout the system
 - a. No single part of the system should get too large
 - b. Each class should have a single responsibility it accomplishes

4. **Minimize dependencies** between objects when you can
 - a. Ask don't tell
 - b. Don't have message chains

5. **Don't duplicate** code
 - a. Similar "chunks" of code should be unified into functions
 - b. Classes with similar features should be given common interfaces
 - c. Classes with similar internals should be simplified using inheritance

