CSCI 204 Study Guide for Exam One

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1 The Rules

- You may bring one 8x11 information sheet of paper with anything you like **hand-written** on it, one or two sided. No printed information is allowed.
- Any code or information which comes from the Internet, a non-cs204-course textbook, or another person needs a citation. Information from the Internet or from an outside book or person may only be used on this exam with cites and at the instructor's discretion. Always ask if you are unsure.
- Do **not** bring any electronic devices such as calculator, PDA, cell phone, or Blackberry. If you have to have one with you (such as a cell phone), turn it off and don't take it out.
- You must staple your information sheet to the exam before you hand it in. (I provide the stapler). I reserve the right not to grade your exam if you forget to include your information sheet. If you don't use one, please indicate so on the cover sheet of the exam.
- The exam will begin at 11:00 AM promptly and will end at 11:52 AM promptly. If I make an exam too long, I will deal with it later.
- Do not discuss the exam with anyone else except the instructor until after the exam is over and you are certain they already took it.

2 What's on the exam?

This exam covers the readings and lecture topics up to and including exceptions. This includes material on software design, memory pictures, arrays, object oriented programming, and exceptions. The format may include multiple choice questions, short answer questions, and code writing questions. Copy constructors will not be on the exam.

3 A partial list of subjects

This list may not be complete. You should be able to

- Describe the steps in the software life cycle
- Describe the steps in the waterfall model
- Explain the difference between top down and object oriented design
- Define software, abstraction, encapsulation (information hiding)
- Explain what the static, final, abstract, interface, extends, class, ... keywords mean in Java and when they are used

- Draw a UML diagram for a class, explain the meanings of various components in a UML diagram, draw a UML diagram which includes several classes.
- Describe the information found in a CRC card
- Describe or write a user's manual or technical specification
- Write Java code using selection (if, switch), iteration (for, while, ..), arrays, methods, and classes
- Know how inheritance works in Java (what gets inherited, how to overwrite inherited methods, how to call inherited methods)
- Draw memory pictures for Java code
- Understand arrays and multiple-dimension arrays
- Write constructors, know what a default constructor is
- Write appropriate comments in your code