CS2704 (Keller 1999) Exam 1 Review Topics:
1. Difference between procedural and object-oriented programs (task and subtasks vs. objects and interactions)
2. Rationale for object-oriented program (why isn’t procedural enough?)
3. What abstraction is, properties of good abstraction, how abstraction corresponds to classes and objects
4. How abstraction helps achieve software engineering goals of reusability
5. How separation helps achieve software engineering goals of flexibility and extensibility.
6. Identifying classes and objects
7. Anatomy of a C++ class
8. Use of const in methods
9. Scope and Lifetime
10. Automatic vs. Dynamic objects
11. How problems with dynamic memory relate to issues of scope and lifetime
12. Using constructors and destructors to manage problems with dynamic memory
13. Class relationships
14. Class diagram notation
15. Evaluating class design
16. Manager classes
17. Association, what it means, how one is setup in C++
18. Aggregation – what it means, how it differs from association