A506 / C201 Java Placement Exam
List of Covered Topics

Classes and objects
- **private** / **protected** / **public** qualifiers
- attributes and methods, static and non-static
- the object **this**, target object or calling object
- constructors
- generic classes and methods
- abstract classes, interfaces
- inheritance
- overloading methods

Data structures
- Enumerated types
- Multidimensional arrays
- Linked list, implementing singly linked lists, traversal, inserting and removing nodes
- Files, open, close, input and output, **java.io.File** and **java.io.FileWriter** classes
- **String** class, text manipulation, Unicode system

Functions and Libraries
- Formatted output with **System.out.printf**
- The **Arrays** class, sorting, binary search, fill function, etc
- Function overloading, polymorphism
- Generic functions,

Recursion
- Base case, recursive call
- Runtime stack
- Preventing infinite recursion