

Minimal competencies for CSC 121 – Approved 4/14/00

Introduction to Computer Science I

Classes

- Instance methods
- Class methods
- Instance variables
- Class variables
- Constructors
- Visibility modifiers such as public and private

Objects

- Instantiation
- Message passing/method invocation
- Parameter passing, including passing objects as parameters
- Return types for methods including methods that return objects

Program Control Structures

- Selection
 - if statements and all variants
 - switch statement
- Iteration
 - for loops
 - while loops
 - do-while loops

Strings

- instantiation
- manipulation (for example, reverse, change case etc.)

Data Structures

- 1-D arrays
- 2-D arrays
- Arrays of objects

Packages

- Using pre-existing packages (such as javabook)

GUI

- Using pre-defined GUI components such as windows, text boxes, input boxes, choice boxes.

Multiple class files

- Programs which require the student to develop two or more classes which reside in separate files.

Files

- Introduction to reading and writing text files.