

# CSCI 135 – Fundamentals of Computer Science I

## Exam I Study Outline

### I. Python Basics

- A. How Python is compiled and run
- B. Python program parts
- C. Sequential Execution
- D. Idle Shell and Editor
- E. Command Window

### II. Variables and Data Types

- A. Variables
  - 1. Declaration
  - 2. Assignment
- B. Basic data types
- C. Type Conversion
- D. Operations on different data types
  - 1. String Manipulation
  - 2. Math Expressions
  - 3. Boolean Expressions

### III. Lists

- A. Declaration
- B. Creation
- C. Initializing list elements
- D. Accessing list elements
- D. Modifying list elements
- E. Operations on Lists
  - 1. Slicing
  - 2. Copying
  - 3. List Comprehensions
- F. Multidimensional lists

### IV. Conditionals

- A. If
- B. Format/syntax
- C. How to use them
- D. Enumerations

### V. Loops / Iteration

- A. while
- B. for
- C. Format/syntax
- D. How to use them

### VI. Input/Output

- A. Screen Output

1. print

B. Input

1. Interactive input
2. Command line input