



## Hankuk University of Foreign Studies

### 2024 Summer Session

## CSC 280 Introduction to Programming with Objective & Data Structure

### Course Outline

**Course Code:** CSC 280

**Instructor:** Mo Sha

**Home Institution:** Florida International University

**Office Hours:** TBA and by appointment

**Email:** [msha@fiu.edu](mailto:msha@fiu.edu)

**Credit:** 4

**Class Hours:**

This course will have 52 class hours, including 32 lecture hours, professor 8 office hours, 8-hour TA discussion sessions, 4-hour review sessions.

#### **Course Description:**

Review of programming concepts, programming environments, debugging tools, and large program management and design. Formal description and implementation of data structures using the C and C++ programming languages.

#### **Course Objectives:**

This course is designed to provide a solid foundation and background in basic programming techniques and concepts, as well as an overview of programming using the C and C++ languages:

- review basic programming concepts and problem solving techniques
- programming in a Linux environment without the help of an IDE
- programming and problem solving using the C and C++ languages
- overview of object-oriented programming



- overview and implementation of simple data structures
- system tools useful for debugging

**Required Textbooks:**

Brian W. Kernighan and Dennis M. Ritchie. The C Programming Language. 2nd edition, Prentice Hall, 1988 [Free online].

Bjarne Stroustrup. The C++ Programming Language. 4th edition, Addison Wesley, 2013

**Grading System (1 ~ 100)**

A+ : 96 - 100	A : 91 - 95
B+ : 86 - 90	B : 81 - 85
C+ : 76 - 80	C : 71 - 75
D+ : 66 - 70	D : 60 - 65
F : 0 - 59	
Pa : Pass	Fa : Fail

**Course Schedule:**

**Week 1:** Basic C Programming Concepts, C Programming Environment, Variables and Conditionals, and Bitwise Operations.

**Week 2:** Preprocessing, Functions, Arrays, and User-defined Data Types,

**Week 3:** Pointers and Input and Output.

**Week 4:** Object-oriented Programming, Basic C++ Programming Concepts, Classes, and Member Functions.