



National Taiwan University of Science and Technology

2022 Summer Program

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

Credit: 4

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 & Evaluation:

A+:4.3——95-100

A :4.0——87-94

A -:3.7——82-86

B+:3.3——78-81

B :3.0——75-77

B -:2.7——71-74

C+:2.3——68-70

C :2.0——65-67

C -:1.7——61-64

D :1.0——55-60

E :0.0——49-54

X :0.0——0



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.