# Programming and Computer Applications-2

# Course Overview

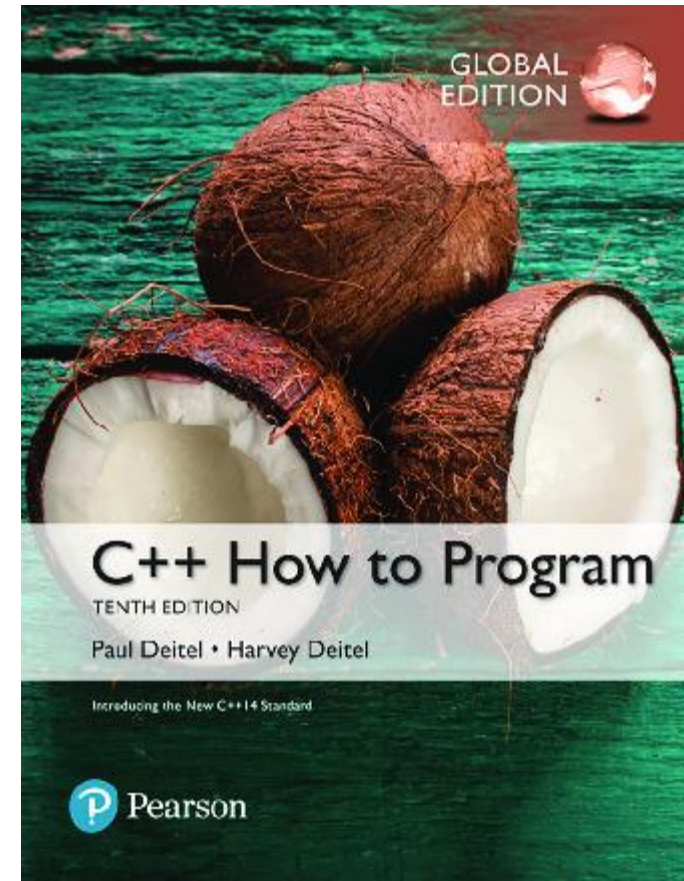**Instructor : PhD, Associate Professor Leyla Muradkhanli**

# Course objectives

- The main objective of this course is to introduce students C++ programming language and the usage of the object oriented methodology for coding complex C++ programs.
- The practical part of this course is covered in the lab through exercises, practical assignments, and tutorials.
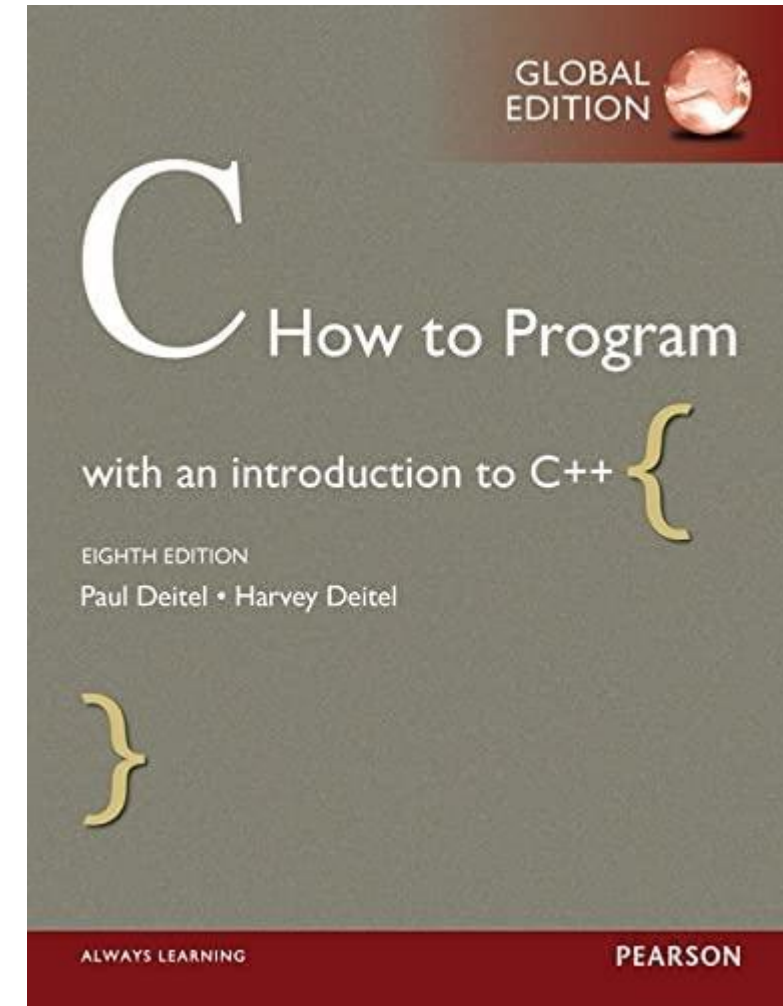
# Textbooks

## Main Textbook

C++ How to Program, 10th edition,
Paul Deitel and Harvey Deitel,
Global edition, Prentice-Hall, 2017.
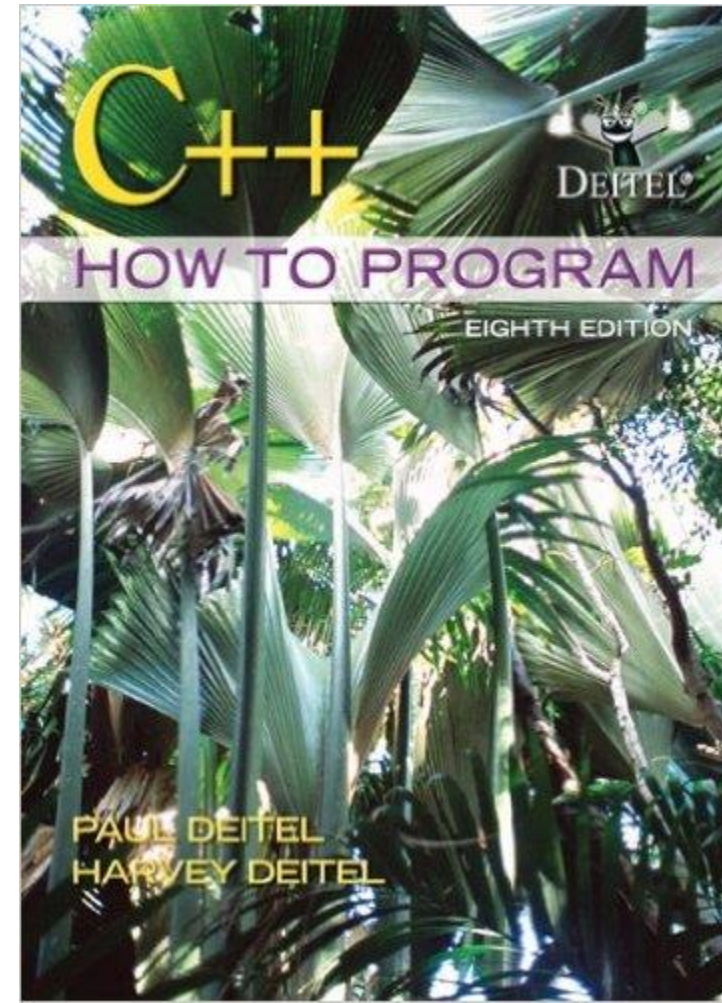
# Textbooks

## Main Textbook

C How to Program with an Introduction C++, 8th edition, Paul Deitel and Harvey Deitel, Global edition, Pearson, 2016.
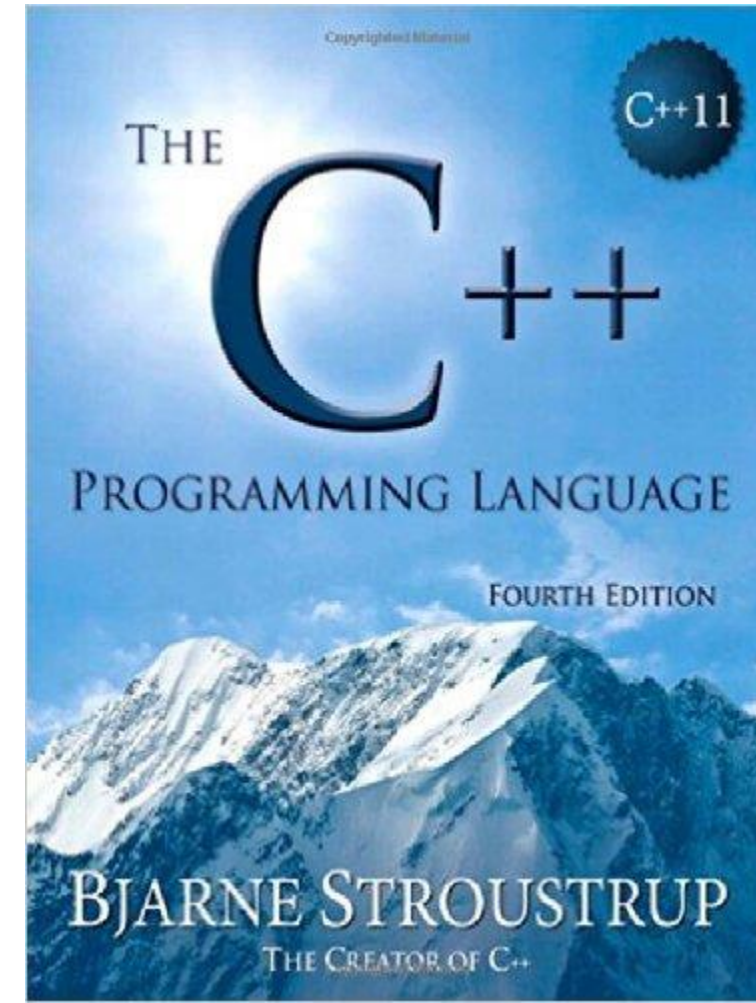
# Textbooks

## Main Textbook

C++ How to Program, 8th edition, Paul Deitel and Harvey Deitel, Prentice-Hall, 2012.

# Textbooks

**Additional Reading**

- The C++ Programming Language, Biarne Stroustrup, 4$^{th}$ edition, Addison-Wesley, 2013.

# Textbooks

**Additional Reading**

• C++ Tutorial,  Simply Easy Learning by tutorialspoint.com

http://www.tutorialspoint.com/cplusplus/

# Grading Criteria

- **Laboratory work/Assignments - 30%**
- **Quizzes– 30%**
- **Final Exam – 40%**

# COURSE OUTLINE

**Major topic areas:**

- **Introduction to C++ Programming**
- **Introduction to Classes and Objects**
- **Classes : A Deeper Look**
- **Operator Overloading; Class string**
- **Object-Oriented Programming : Inheritance**
- **Object-Oriented Programming : Polymorphism**

# COURSE OUTLINE

- **Exception Handling**

- **Templates**

- **Linked Lists**

- **Stacks**

- **Queues**