

Programming Languages Syllabus 2021-2022 Spring

Professor: Dr. Özerk Yavuz
E-Mail: dr.ozerk@gmail.com

Course Description

In this course, key foundations and fundamentals of programming languages will be introduced. An overview of algorithms and programming topics will be given.

Recommended Readings

Concepts of Programming Languages, Robert W. Sebesta, Pearson
Introduction to Algorithms, 3rd Ed, Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein, The MIT Press
Problem Solving in Data Structures & Algorithms Using C++, Hermant Jain
Data Structures and Algorithm Analysis in C++, 4th Edition Weiss, Mark A., Pearson
Big Java: Late Objects, Big Java Late Objects, Enhanced eText, 2nd Edition, Wiley
Algorithm Design: Foundations, Analysis, and Internet Examples, Michael T. Goodrich and Roberto Tamassia, Wiley
C++ How to Program, 10th Edition, Paul J. Deitel, Pearson

Lecture Contents

Week 1	Introduction Overview of Programming Languages
Week 2	Evolution of the Major Programming Languages
Week 3	Describing Syntax and Semantics
Week 4	Lexical and Syntax Analysis
Week 5	Names, Bindings, and Scopes
Week 6	Data Types
Week 7	Expressions and Assignment Statements
Week 8	Midterm Exam
Week 9	Midterm Exam
Week 10	Statement-Level Control Structures
Week 11	Subprograms
Week 12	Implementing Subprograms
Week 13	Abstract Data Types and Encapsulation Constructs
Week 14	Support for Object-Oriented Programming Concurrency Exception Handling and Event Handling Functional Programming Languages Logic Programming Languages
Week 15	Review of the topics before final exam
Week 16	Break
Week 17	Final Exam

Week 18	Final Exam
----------------	------------

Grading Policy

Midterm:	%40
Final:	% 60

Wish all of you a successful, happy and healthy academic year.

Please send your questions and suggestions to my e-mail.