# **Global Learning Semesters**

# **Course Syllabus**

Course: COMP-353 Programming Languages

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
COMP-353	Programming Languages	3
Semester Offered	Contact Hours	Prerequisites
Fall/Spring	42	COMP-301 Data Structures
Department	Level of Course	Language of Instruction
Computer Science	Upper Division	English

### **Course Description**

Comparative study of the various types of computer languages: procedure-oriented, program-oriented, fourth generation, event-driven, and object-oriented. The general principles of modern programming language design: Imperative (as exemplified by Pascal, C, and Ada), functional (Lisp), and logical (Prolog) languages. Data management, abstract data types, and object-oriented languages (Ada, C++). Control structures, syntax and formal semantics.

#### Instructor

Nicolaou Neophytos

#### **Course Aims and Objectives**

To introduce students to the various types of computer languages, principles of programming language design, syntax and formal semantics

#### **Teaching Methods**

The course is delivered through a mixture of lectures, lab presentations, lab tutorials and practical exercises and assignments.

#### **Course Teaching Hours**

42 hours (18 hours lectures/presentations + 24 hours laboratory work). The course is delivered during the Fall and Spring semesters in 14-weeks (3 hours/week). During the Summer session the course is delivered in 7 weeks (6 hours/week).

#### **Evaluation and Grading**

Homework: 20% Mid-Term: 30% Final Exam: 50%

# **Readings and Resources**

#### **Required Textbook**

H.E.Bal, D. Grune, Programming Language Essentials, 1994, Addison-Wesley, (ISBN:0-201-63179-2)

## **Recommended Reading**

M. Marcotty, H. Ledgard, Programming Language Landscape; Syntax, Semantics, Implementation, Sra Science-Research Associates, Inc.