

Department of Electrical and Computer Engineering
University of Puerto Rico
Mayagüez Campus

ICOM 4036 – Structure and Properties of Programming Languages
Course Outline – Fall 2003

Topics	Estimated Hours
Course Introduction and Overview: Brief History of PLs, PL Design Criteria	1.5
Programming Paradigms I: Low-level programming	1.5
Programming Paradigms II: Imperative Programming	4.5
Programming Paradigms III: Functional Programming	4.5
EXAM I	
Programming Paradigms IV: Logic Programming	4.5
Programming Paradigms V: Object-Oriented Programming	3.0
Programming Paradigms VI: Scripting	1.5
EXAM II	
Programming Language Specification	1.5
Programming Language Translation	4.5
Names, Bindings, Scopes and Lifetimes	3.0
Type Systems	3.0
Expressions and Control Structures	1.5
EXAM III	
Procedures and Functions	3.0
Abstract Data Types	3.0
Polymorphism	1.5
Concurrency and Parallelism	1.5
Exceptions	1.5
FINAL EXAM	
Total number of hours¹	45

Prepared by: Prof. Bienvenido Vélez-Rivera
Last revision: 8/14/2003

¹ Total includes three hours for exam discussion