

Global Learning Semesters

Course Syllabus

Course: COMP-455 Object-Oriented Programming

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
COMP-455	Object-Oriented Programming	3
Semester Offered	Contact Hours	Prerequisites
Fall	42	COMP-255 C++ Language Programming: Good programming skills, understanding of functions, scope, user-defined data types, etc.
Department	Level of Course	Language of Instruction
Computer Science	Upper Division	English

Course Description

Introduction to object orientation and Java applications and applets. Overview of the programming language syntax (classes, variables, operators, control structures, methods). Introduction to Object Oriented Design with the UML. Classes and objects, methods, initialization and cleanup. Data abstraction and encapsulation. Inheritance and class reusability. Polymorphism. Java API and interfaces. Exception handling. Containers.

Instructor

Dr Socrates Mylonas

Course Aims and Objectives

To introduce students to the principles and practicalities of Object Oriented programming so that they can understand and use correctly concepts such as abstraction, classes, objects scope rules, constructors, finalizes (destructors), function overloading, inheritance and polymorphism.

Teaching Methods

The course is delivered through a mixture of lectures, practical exercises and assignments a supervised laboratory project and an unsupervised programming project.

Course Teaching Hours

42 hours of lectures with additional lab hours arranged for practical work and presentations. The course is delivered during the fall semester in 14-weeks (3 hours/week).

Evaluation and Grading

Homework: 20%
Mid-Term: 30%

Final Exam: 50%

Readings and Resources

Required Textbook

Deitel H. M., Deitel P. J., Java™ How to Program, 5th Ed., Prentice Hall, 2003.

Recommended Reading

Eckel, B., Thinking in Java, 3rd Ed, Prentice Hall, 2003.

P. Harmon and M. Watson, Understanding UML, The Developer's Guide; Morgan Kaufmann , 1998.

Wu, C. T., An Introduction to Object-Oriented Programming With Java; McGraw Hill, 2000.