

# University of the Philippines, Diliman College of Engineering Department of Computer Science

## Course Information

Course Number: CS 12

Course Schedule: **WFUV** W 11:00-1:00 lec, F 10:00-1:00 lab

**THUV** T 11:00 - 1:00 lec, Th 10:00 - 1:00 lab

**THWX** T 2:00 - 4:00 lec, Th 1:00 - 4:00 lab

Course Title: Computer Programming II

Course Description: Advanced programming techniques. Recursion. Abstract Data Types:

stacks, queues, linked structures. Programming interfaces. Introduction to object-oriented programming: classes, inheritance, polymorphism.

Event-handling. Exception handling. API programming.

Credit: 3 units
Prerequisite: CS 11

Methodology: In-class lectures, programming exercises and projects

Instructor: Kristofer E. delas Peñas

Consultation: MWF 1:00-4:00, Rm. 307, UPAECH Email Address: kedelaspenas@up.edu.ph

# **Course Requirements**

The course has two components: lecture and laboratory. Grade for the lecture component comprises 40% of the final grade of the student, while the remaining 60% will come from the laboratory component. To pass the course, the student must **pass both components**.

The following shows the requirement breakdown for this course.

- Long Exams 30%
- Quizzes 10%
- Machine Exercises 20%
- Hands-on Exams 20%
- Machine Problem 20%

## Tentative Course Schedule

Date	Topic/Activity
19-22 January	Course Introduction/Introduction to Java
26-29 January	Programming Paradigms/Control Structures
2-5 February	Functions: Recursion and Modularity
9-12 February	Arrays
16-19 February	Classes
23-24 February	FIRST LONG EXAM
1-4 March	Abstraction and Encapsulation
8-11 March	Inheritance and Polymorphism
15-18 March	Interfaces
21 March	FIRST HANDS-ON EXAM

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29-30 March	Event and Exception handling
5-8 April	Design Principles
12-15 April	Design Patterns
19-22 April	SECOND LONG EXAM
26-29 April	Lists, Stacks, Queues
3-6 May	Linked Structures
10-13 May	API Programming
16 May	SECOND HANDS-ON EXAM
17-18 May	THIRD LONG EXAM

## Class Policies

#### • Attendance

Attendance will not be checked. It is the student's responsibility to attend classes and consult for any missed lectures. Failure to submit a requirement due to unexcused absence shall result to a grade of zero for the said requirement.

#### Collaboration

Students are allowed to informally collaborate on their assignments, exercises and machine problems with other students who have taken the course previously or are currently taking the course. Submitting code copied verbatim or nearly verbatim even with proper citation is prohibited unless otherwise specified by the instructor.

#### Consultation

Consultation is encouraged. A student who wants to consult should inform the instructor at least a day before his/her preferred day of consultation.

### Loss of Work

Students should make backup copies of all their work in this course. Loss of work due to hardware failure will not be considered as an acceptable excuse for late submission or non-submission of requirements.

### • Late Submission

Deadlines will be strictly observed. Requirements submitted late will not be credited unless otherwise specified by the instructor.

### • Previous Work

Students are free to use programs they have written in the past provided they follow the required format and are authorized by the instructor.

## Cheating

Any instance of copying the works and/or thoughts of others and passing it as one's own is considered as plagiarism. In using course materials, students should be careful not to claim words, ideas and algorithms as one's own.

# **Grading System**

Students will be graded according to the following scale:

General Average	Final Grade
[92 - 100]	1.0
[88 - 92)	1.25
[84 - 88)	1.50
[80 - 84)	1.75
[76 - 80)	2.00
[72 - 76)	2.25
[68 - 72)	2.50
[64 - 68)	2.75
[60 - 64)	3.00
[0 - 60)	5.00

## References

Any OOP/Java book