

The Islamic University of Gaza Faculty of IT

Department of Computer Science

Second Semester 2020-2021

Instructor: Dr. Iyad AlAgha

**Course Syllabus**

**Course Name:** Programming 2

**Course ID:** CSCI 1306

1. **Course Description**

The main focus of this course is to introduce the concept of Object Oriented Programming, OOP, through deep learning and practicing of the JAVA Language. Many examples are provided to emphasize the advantages of using the OOP paradigm in designing and implementing course assignments and projects. The course deals with different aspects of OOP like: classes and objects, polymorphism, encapsulation, abstract classes, interfaces, inheritance, exception handling, files, garbage collection and much more. Some Software Engineering concepts and techniques will be essential in order to support the students educational experience during the course.

1. **Course Outline**

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| --- | --- |
| **Topic** | **No. of weeks** |
| Review of programming concepts | 1 |
| Object Oriented Programming(Ch5, Ch6) | 1 |
| Inheritance (Ch8) | 2 |
| Polymorphism (Ch8) | 2 |
| Exception Handling (Ch9) | 1 |
| Files(Ch10) | 1 |
| GUI | 3 |
| Collections (Ch12) | 2 |
| Introduction to threading | 1 |
|  | Total: 14 weeks |

1. **Course Book**
   1. **Java: An Introduction to Problem Solving and Programming, 8th Edition**, By Walter Savitch, Pearson Prentice Hall (2019)
2. **Grading**

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| --- | --- |
| **Criterion** | **Percentage** |
| **Course work:** Assignments | **20%** |
| **Mid exam** | **30%** |
| **Final exam** | **50%** |
| **Total** | **100%** |

1. **Note:**

* All course’s material will be available online through course Moodle website
* All lectures will be recorded using Zoom and will be available on the course Moodle website.
* Office Hours will be conducted On Zoom
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