

| Preparation week | HWs | Day 1 | ws | Day 2 | fws | Day 3 | Hws | Day 4 | s | Day 5 | Hws |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Self-Study <br> Instruction on Installing the Java virtual Machine, on your computer, and Testing (Instructiona and Vedios will be provided upon registartion) | 4 | Lecture 1: Variables and Data Type <br> Introduction to course and how to uses Variable and Data types in Java. | 2 | Lecture 3: Loops <br> 1- What Loops, <br> 2- While Loops, 3- For Loops, <br> 4. Nested Loops <br> 5- Do Loops, <br> 6- New Loop Statement, <br> 7- Infinite Loops. | 2 | Lecture 5: Functions and Modules <br> 1- Definition, <br> 2- Static Function <br> 3-Modules, <br> 4-Libraries | 2 | Lecture 7:Inheritance in Java Part 1 <br> 1- Poly morphism, <br> 2-Method Overloading, <br> 3-Inheritance, <br> 4-Method Overriding, <br> 5- Constructors and Inheritance. | 2 | Lecture 9: Case Study <br> 1- Problem description, <br> 2-Requirements, <br> 3- Problem Analysis, <br> 4 - Solve the problem | 2 |
| Self-Study <br> Instruction on Installing the IDE, on your computer, and Testing (Instruction and Vedios will be provided upon registartion) | 4 | Lecture 2: Condition and Operators <br> 1- Program Control Flow. <br> 2-IF and IF ELSE statements. <br> 3- Nested IF statement. <br> 4-Switch Statement. | 2 | Lecture 4: Array and Lists <br> 1-Definition, <br> 2. One dimensional array, <br> 3-Two-dimensional array <br> 4-Multi-dimensional array <br> 5-Java List, <br> 6-Array Lists, | 2 | Lecture 6: Methods and Classes <br> 1- Introduction to Object Oriented Programming, <br> 2-Classes and Objects <br> 3- Methods return values, <br> 4- "this" keywords <br> 5-Constructor, <br> 6- Encapsulation and data hiding. | 2 | Lecture 8: Inheritance in Java Part 2 <br> 1- Supper keyword, <br> 2-Multilevel Inheritance, <br> 3-Abstraction, <br> 4- Interface, <br> 5-Lambda Function. | 2 | Lecture 10: Assessment <br> Students will receive the questions and they have to submit results before ending on the session using online testing, | 2 |
| Self-Study <br> 1- Eclipse first start, <br> 2- Create your First Program, <br> 3- Run your Fist Program | 2 | Programming Practical 1 <br> Programming Exercises. You will work through the instructions for class for programming. The lecturer will answer questions over chat and will drop in to check your progress. | 2 | Programming Practical 2 <br> You will work through the instructions for class for programming. The lecturer will answer questions over chat and will drop in to check your progress. | 2 | Programming Practical 3 <br> Programming Exercises. <br> You will work through the instructions for class for programming. The lecturer will answer questions over chat and will drop in to check your progress. | 2 | Programming Practical 4 <br> Programming Exercises. You will work through the instructions for class for programming. The lecturer will answer questions over chat and will drop in to check your progress. | 2 |  |  |
|  |  | Self-StudyReading lectures and repeating and testing all the <br> excises | 8 | Self-Study <br> Reading lectures and repeating and testing all the excises | 9 | Self-Study <br> Reading lectures and repeating and testing all the excises | 10 | Self-Study <br> Reading lectures and repeating and testing all the excises | 10 |  |  |
|  | 10 |  | 14 |  | 15 |  | 16 |  | 16 |  | 4 |
| 75 Hours |  |  |  |  |  |  |  |  |  |  |  |
| EcTs |  |  |  |  |  |  |  |  |  |  |  |

List of tabrevisitions
HWS: Hours per week
Hws: Hours per week (thour $=45$ min.

## Ssersment titrormation <br> our assesmenens vilbe we eqhed ds follows. 

