# CT60A2411
# Object Oriented Programming: Java

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## Learning objectives: This week

- Course guide in detail: objectives, course schedule, overview of learning activities, assessments and course grade calculations
- Java: Object Oriented Programming
- Your first Java program
- Installing Apache NetBeans IDE (refer tab: JDK and IDE for Java in Moodle)
- To become familiar with Apache NetBeans

At the conclusion of this lecutre, students will be able to understand the course structure, how to start writing and running Java programs using Apache NetBeans

Check ”Welcome to CT60A2411” tab in the Moodle contains **course guide…*. pdf**”

**On completion of this course, you should:**

- be able to use standard Java classes and interfaces.
- use object-oriented program development framework.
- be able to develop simple algorithms and implement them using the standard methods
- be able to use data structures and other container classes for storing and manipulating objects.
- be able to correctly manipulate standard file I/O
- be able to handle exceptions thrown and write exception classes.
- be able to know basic features of Android development via JDK

## Course schedule: Learning activities

- Lecture sessions per week : 90 minutes [2 X 45 minutes]
- 14 lecture sessions
- Lecture attendance **is optional**.

- Tutorial sessions per week 1 X 90 – 120 minutes [12-weeks]
- Attending tutorial session **is optional**.

- What are you supposed to do during tutorial/lab sessions?
  - Solving weekly assessment tasks, asking questions, discussing with peers and teacher(s) about topics studied, doing project work individually, preparing for quiz and more…

## Overview of assessment tasks

- Weekly assignments  worth 30%
- Midterm exam worth 10%
- Project work worth 30% and
- Final exam worth 30% for course grade calculation

(i) **Weekly programming assignment : 40-60 tasks/exercises**

- Each week 4-6 exercises will be delivered via Moodle [ 12 Weeks*]
- Submit solutions using **CodeGrade** linked at Moodle for automatic/manual grading
- Multiple submission is allowed until the due date*
- Total points: 100 [ included for grade calculation]

**(ii) Midterm exam : in Week 6**

- It will be conducted in Moodle
- Lecture week contents Week 1- Week 5
- Total points: 100 [ included for grade calculation]

# Overview of assessment tasks: continued

(iii) **Project Work (Individual work)**

- Will be released in Week 6-7 in Moodle
- This project work must be completed individually and submitted on or before Week 12 Friday at Moodle for evaluation
- It carries 100 points/marks [included in the grade calculation]

- (iv) **Final exam**
- It will be a Moodle based Final exam
- It carries 100 points/marks [included for grade calculation]

* Subject to change/will be notified later in detail

# Course grade calculation

| Assessment task | Points/marks | Weight |
|---|---|---|
| (i) Weekly programming assignment (PE)* | 100 | 30% |
| (ii) Midterm Exam (ME) | 100 | 10% |
| (iii) Project work (individual) (PJ)* | 100 | 30% |
| (iv) Final exam (FE)* | 100 | 30% |
| * marked are hurdles | Total | 100% |

To attain a pass in the course, you are required to pass both the continuous assessment (excluding midterm exam) and the final exam components. Each component should therefore be **viewed as a hurdle**.

# Course grade calculation: continued

To attain a pass in the course, students are required to pass both the continuous assessment and the final exam components. Each selected assessment component (excluding midterm exam) should therefore be viewed as a hurdle.

**Example:**

- Possible total score for PE is 100*. Student should secure at least 50 points (50% of the PE)
- Possible total score for PJ is 100*. Student should secure at least 50 points (50% of the PJ).
- Possible total score for FE 100*. Student should secure at least 50 points (50% of the FE).

# Course grade calculation: continued**

Grade calculation: (30% of PE + 10% of ME + 30% PJ + 30% of FE = 100%)

- The final mark is determined by totaling the weighted marks of each assessment component. If the weighed total is less than 50%, it will be the final numeric mark, and the final grade will be ZERO.

| Scores / Points in % | Grade |
|---|---|
| 0 to 49 | 0 |
| 50 to 59 | 1 |
| 60 to 69 | 2 |
| 70 to 79 | 3 |
| 80 to 89 | 4 |
| 90 to 100 | 5 |