# Department of Computer Science and Engineering Kathmandu University Dhulikhel, Kavre



**Subject: Object Oriented Analysis and Design** 

**Course: COMP 410** 

Level: B.E 4th Year Credit Hours: 3

#### COURSE DESCRIPTION:

To provide the knowledge of Object Technology and the use of it in software development.

### COURSE CONTENTS:

- 1. Complexity
  - 1.1. Introduction
  - 1.2. The inherent complexity of software
  - 1.3. The attributes of complex system
  - 1.4. The structure of complex system
  - 1.5. Bringing order to chaos
  - 1.6. Designing complex system
- 2. The Object Model
  - 2.1. Elements of object model
  - 2.2. Applying object model
- 3. Classes and Objects
  - 3.1. Nature of an object
  - 3.2. Relationship among objects
  - 3.3. Nature of class
  - 3.4. Relationship among classes
- 4. The Notation
  - 4.1. UML [Unified Modeling Language]
  - 4.2. Message sequence chart [MSC]
- 5. The Process
  - 5.1. First Principles
  - 5.2. The micro development process
  - 5.3. The macro development process
- 6. Case Study

#### TEXT BOOKS:

N/A

## REFERENCES:

1. Object Oriented Analysis and Design with Application – *Grady Booch* 

## **EVALUATION**:

Internal: 50

External: 50