



COURSE TITLE : Object Oriented Analysis and Design
 COURSE DURATION : 13 weeks (3 hours/week)
 COURSE METHODOLOGY: Combination of lecture and written exercises

Course Description

This course introduces students to the basic concepts, principles and dynamics of Object Oriented Analysis and Design using UML 2.0 notation. A case study provided at the end of the course applies the concepts and methodologies learned from the course.

Course Outline

Week	Topics
1-2	Introduction to Object Orientation <ul style="list-style-type: none"> The Object Oriented Methodology
3-4	The Requirements Phase <ul style="list-style-type: none"> Use Cases Modeling the Business Modeling the System
5-6	The Analysis Phase <ul style="list-style-type: none"> Static Analysis <ul style="list-style-type: none"> Classes Relationships Class and Object Diagrams Attributes Dynamic Analysis <ul style="list-style-type: none"> Drawing Use Case Realizations Adding Operations to Classes State Modeling
7-8	The Design Phase <ul style="list-style-type: none"> Steps in System Design Designing the Subsystems Mapping the Analysis Class Model into the Design Class Model Mapping an Object Model to a Relational Model
9-12	Design Patterns <ul style="list-style-type: none"> Creational patterns Structural patterns Behavioral patterns
13	Case Study-Toy Room, Inc.