COMC 2750: UML Modeling and Iterative Process

A. COURSE DESCRIPTION

Credits: 2
Lecture Hours/Week: 1
Lab Hours/Week: 2
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course covers fundamental software engineering concepts of object modeling, the process (using the Unified Process) and notation (using UML) of object oriented analysis and design, the use of design tools, strategies and patterns for applying object oriented methodologies to realistic applications, and design implementation. (Corequisite: COMC2740) (2 Credits: 1 lecture/1 lab)

B. COURSE EFFECTIVE DATES: 05/04/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Strategies and patterns for class identification
2. Object-oriented application implementation
3. UML class diagrams, sequence diagrams
D. LEARNING OUTCOMES (General)

1. Determine problem domain classes
2. Describe use cases
3. Determine human interaction classes
4. Determine data management classes
5. Determine system interaction classes
6. Determine actors/participants
7. Determine place classes
8. Determine tangible thing classes
9. Determine descriptive classes
10. Determine transaction classes
11. Determine class attributes
12. Determine class inheritance
13. Determine object aggregations
14. Determine object associations
15. Determine class methods (behaviors)
16. Determine problem domain dynamics
17. Determine window objects
18. Determine report objects
19. Determine human interaction scenarios
20. Determine system interaction dynamics
21. Determine data management dynamics
22. Apply reuse mechanisms
23. Implement HI-PD sequence diagram
24. Implement HI-PD-DM sequence diagram
25. Display professional attitude

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

This course was previously called Object Oriented Analysis and Design