

FSU CURRICULUM FILE SYLLABUS

DATE APPROVED _____ (COMPLETED AT UNIV LEVEL)

COURSE PREFIX/NUMBER: COP 3331

COURSE TITLE: Object Oriented Analysis and Design

PRE OR COREQUISITES: COP 3330 REPEAT CODE: 00

LIST COURSE OBJECTIVES:

1. Be able to describe the concepts of Object Oriented Design and Programming techniques
2. Write small Object Oriented style Java Programs using a Graphical User Interface (GUI)
3. Understand the issues of ethics in field of Computer Sciences
4. Describe and explain the main stages, methods, tools, techniques, and problems involved in systems and software engineering.
5. Explain the main concepts and goals of analysis and design.
6. Demonstrate practical skill in the use of an analysis and design notation using the Uniform Modeling Language (UML)
7. Be able to translate UML design into actual code.
8. Become proficient in the use of a UML tool such as Rational Rose.

OBJECTIVES SHOULD BE BROADLY STATED TO ALLOW FACULTY DIFFERENCES AND ALLOW CHANGES IN MODE OF DELIVERY. ENOUGH DETAIL SHOULD BE GIVEN TO DISTINGUISH FROM OTHER COURSES IN ASSIGNMENT OF A SUS COURSE NUMBER. COMMITTEE APPROVALS ARE REQUIRED FOR A CHANGE IN OBJECTIVES.

GIVE BRIEF OUTLINE OF TOPICS TO BE COVERED (NO DATES):

1. Course Introduction
2. Java – OOP vs Procedural Programming, Classes, Applets, Control Statements, Methods, Arrays, Inheritance, Strings, GUIs
3. UML – Relationship and Use Case Diagrams, Class Diagrams, Sequence and State Diagrams
4. OOD – Requirements Modeling, Classes, Inheritance and Polymorphism
5. Design Patterns – Adapter, Bridge, Creational, Abstract Factory, and Command
6. Ethical Considerations

EVALUATION CRITERIA CHECK ONE (CHANGE IN EVALUATION CRITERIA REQUIRES THE DEPARTMENT TO SUBMIT A NEW SYLLABUS FOR THE FILE)

EXAMS ONLY (THE NUMBER AND WEIGHT OF EACH TO BE REFLECTED ON THE STUDENT SYLLABUS)

EXAMS AND OTHER (SUCH AS LAB REPORTS OR ASSIGNMENTS, TERM PAPER OR WRITTEN PROJECT, ORAL PRESENTATION; THE WEIGHT OF EACH TO BE REFLECTED ON THE STUDENT SYLLABUS.

NO EXAMS - ONLY ASSIGNMENTS (TO BE DESCRIBED CLEARLY ON THE STUDENT SYLLABUS)