

CCS2304 Advanced Programming Applications

COURSE INFORMATION

Prerequisites	Academic Year & Level		Teaching Methods			Credit Hrs.
	Year	Semester	Lecture	Tutorial	Laboratory	
CCS2303	2	4	2	2	0	3

COURSE AIM

- Implement advanced OOP programs using a high level programming language.
- Build advanced user interfaces.
- Understand multithreaded programming.
- Communicate with a DBMS.
- Discuss distributed computing.
- Build simple client-server applications using socket programming.
- Discuss RMI and CORBA.
- Be familiar with different design patterns.

COURSE WEEKLY CONTENTS

1	Review: Encapsulation/OO relationships and polymorphism
2	Basics of GUI development
3	Exceptions and file Processing
4	Event handling
5	Database Programming
6	Exception and File I/O
7	Build graphical user interfaces
8	Database Programming (Case Studies)
9	Generic Programming
10	Design Pattern: Introduction (factory, builder, Singleton, and prototype patterns)
11	MVC Architectural Pattern and Observer design pattern
12	Multithreading
13	Socket Programming
14	Remote Method Invocation (RMI)
15	Course Review and Conclusion

STUDENT GRADING & ASSESSMENT

Weeks	Exams	Assign.	Quizzes	Reports	Present.	Lab.	Total
1 to 7	←		3 0	MARKS		→	30
8 to 12	←		2 0	MARKS		→	20
1 to 15	←		1 0	MARKS		→	10
16 or 17	40	Final					40

REFERENCES

Textbook Y Daniel Liang, Introduction to JAVA Programming, Comprehensive Version, Pearson.