

KONGUNADU ARTS AND SCIENCE COLLEGE(AUTONOMOUS)

Re-Accredited by NAAC with 'A+' Grade (4th Cycle)

College of Excellence awarded by UGC

Coimbatore – 641 029.



LESSON PLAN

Department of Computer Applications [UG]

Batch: 2020-21

Semester: IV (Even)

Name of the Staff: A.Immaculate

Name of the Subject: Advanced Java Programming (20UCA409)

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT/FLIPPED CLASS ETC)
UNIT I (13 HOURS)			
1	1	JAVA Evolution: History	Chalk & Talk
2	1	Java Features	Chalk & Talk
3	1	How Java differs from C and C++	Chalk & Talk
4	1	Java and Internet-Java and WWW Web Browsers	Chalk & Talk
5	1	Overview of Java Language: Introduction – Simple Java program	Chalk & Talk
6	1	Structure Lab Exercise-Triangle of Numbers	Chalk & Talk & PPT
7	1	Java Tokens	Chalk & Talk
8	1	Statements Java Virtual Machine	Chalk & Talk
9	1	Classes, Objects and Methods: Introduction- defining class- field declaration	Chalk & Talk
10	2	Method declaration- creating objects Lab Exercise-Dynamic Method Invocation	Chalk & Talk & PPT

11	1	Constructors and Method Overloading	Chalk & Talk
12	1	Overriding Methods	Chalk & Talk
UNIT II (15 HOURS)			
13	3	Arrays: One Dimensional Arrays- Creating an array	Chalk & Talk
14	3	Two dimensional Arrays	Chalk & Talk
15	3	Strings	Chalk & Talk
16	2	Vectors	Chalk & Talk
17	4	Interfaces: Multiple Inheritance Lab Exercise: Personal Details	Chalk & Talk & PPT
UNIT III (16 HOURS)			
18	1	Packages: Putting classes together	Chalk & Talk
19	1	Multi Threaded Programming	Chalk & Talk
20	1	Lab Exercise: Multithreading	Chalk & Talk & PPT
21	1	Managing Errors and Exceptions	Chalk & Talk
22	1	Lab Exercise: Divide by zero Exception	Chalk & Talk
23	1	Applet programming: Introduction	Chalk & Talk
24	1	How applet differs from other applications	Chalk & Talk
25	2	Lab Exercise: Shapes in Applet Window	Chalk & Talk & PPT
26	1	Applet Life cycle	Chalk & Talk
27	1	Applet Tag	Chalk & Talk
28	1	Graphics programming: Introduction- The Graphics Class	Chalk & Talk
29	1	Lab Exercise: Gridlines	Chalk & Talk

30	1	Lines and Rectangles-Circles and Ellipses	Chalk & Talk
31	1	Drawing Arcs Using control Loops in Applets	Chalk & Talk
UNIT IV (16 HOURS)			
32	1	Lab Exercise: Moving Shapes according to Key Pressed	Chalk & Talk & PPT
33	1	Files: Introduction	Chalk & Talk
34	1	concept of streams – Stream classes	Chalk & Talk
35	1	Using streams – I/O classes	Chalk & Talk
36	1	File class – Creation of files	Chalk & Talk
37	2	Reading/Writing characters	Chalk & Talk
38	1	Lab Exercise: Displaying greet message	Chalk & Talk & PPT
39	2	Reading/Writing Bytes	Chalk & Talk
40	1	Lab Exercise: Display Prime Numbers using Files Concept	Ppt
41	1	Handling Primitive Data types	Chalk & talk
42	2	Lab Exercise: Concatenating & Buffering Files	Ppt
43	1	Random Access Files.	Chalk & Talk
44	1	Lab Exercise: Multiple Selection List Box	ppt
45	1	Lab Exercise: Creating MenuBar	Chalk & Talk & PPT
UNIT V (15 HOURS)			
46	1	Introducing Swings: Origins of swing	Chalk & Talk
47	1	Two key swing features	Chalk & Talk
48	2	components and containers	Chalk & Talk

49	1	Swing Packages	Chalk & Talk
50	1	Lab Exercise: Moving shapes using arrow keys	Chalk & Talk & PPT
51	1	Event Handling creating swing applet	Chalk & Talk
52	1	Exploring Swing	Chalk & Talk
53	1	JLabel and ImageIcon-JTextField	Chalk & Talk
54	2	Lab Exercise: Adding & Removing Items using swing components	Chalk & Talk & PPT
55	1	The Swing Buttons-JScrollPane- JList	Chalk & Talk
56	1	JComboBox-Trees-JTable	Chalk & Talk
57	2	Lab Exercise: Trees in java	Chalk & Talk & PPT

Total Hours : 75.

A. Immaculate
Signature of the Staff
 (A. Immaculate)

Approved
[Signature]
 5.3.22

R. Karthik
Signature of the HoD

Dr. R. Karthik, MCA, Ph.D,
Head, Department of Computer Applications
Kongunadu Arts and Science College,
Coimbatore - 641 029.

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LESSON PLAN

Department of Computer Applications [UG]

Batch: 2020-21

Semester: IV

Name of the Staff: A.Immaculate

Subject Code: 20UCA4C0

Name of the Subject: Advanced Java Programming Lab

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT/FILIPPED CLASS etc
1.	5	Demonstration of sample Program to implement Java Structure	LCD Projector
2.		Demonstration of concept of loops and types	
3.		Implementation of concept of For Loop	
4.		Demonstration of patterns of Triangle of Numbers and Symbols	
5.		Demonstration of Practical Program 1: To print the following triangle of numbers 1 1 2 1 2 3 1 2 3 4 1 2 3 4 5	
6.	5	Demonstration of class and methods	LCD Projector
7.		Demonstration of instance methods	
8.		Demonstration of Overloading methods	
9.		Implementing Dynamic method Invocation	
10.		Demonstration of Java Practical Program 2: To define a class, instance methods, overload them and use them for dynamic method invocation	
11.	5	Demonstration of concept of Applets	LCD Projector
12.		Demonstration of displaying information using Applets	
13.		Implementation of Loops in Applet	
14.		Demonstration of positions in applet	
15.		Demonstration of Java Practical Program 3: To display a message and draw several shapes in Applet window	
16.	5	Demonstration of Layout Manager	LCD Projector
17.		Demonstration of Canvas with sample program	
18.		Implementation of types Gridlines	
19.		Demonstration of loops in Canvas	
20.		Demonstration of Java Practical Program 4: To create an Applet and draw Grid lines.	
21.	5	Demonstration of concept of Frames	LCD Projector
22.		Demonstration of Text Field and Labels	
23.		Demonstration of Buttons with sample Program	
24.		Implementation of use of TextArea in Frames	
25.		Demonstration of Java Practical Program 5: To create a frame with three text field for name, age and qualification and a text Area for multiple lines for address to display Personal Details.	
26.	5	Implementation of sample programs in Frames	LCD Projector
27.		Demonstration of List box	
28.		Demonstration of List Box and Combo box	
29.		Implementation of use of Multiple selection List Box	
30.		Demonstration of Java Practical Program 6: To demonstrate multiple selection list box	

31.	5	Implementation of Object Creation	LCD Projector
32.		Demonstration of Menu driven program in Java	
33.		Demonstration of Menu Bar and Menus	
34.		Demonstration of Menu items	
35.		Demonstration of Java Practical Program 7: To create a Menu bar and pull down menus.	
36.	5	Demonstration of Frames in Java	LCD Projector
37.		Demonstration of Class with Frames	
38.		Demonstration of types of Frames	
39.		Implementation of Keys with Frames	
40.		Demonstration of Java Practical Program 8: To create a window when we press M/m the window displays Good Morning, A/A the window displays Good Afternoon, E/E the window displays Good Evening, N/n the window displays Good Night	
41.	5	Demonstration of shapes in Frames	LCD Projector
42.		Demonstration of sample Programs for applet with Frames	
43.		Implementation of Virtual Keys in Java	
44.		Demonstration of Key Press Events	
45.		Demonstration of Java Practical Program 9: To move different shapes (Circle, Ellipse, Square, Rectangle) according to the arrow key pressed	
46.	5	Demonstration of Exception Handling	LCD Projector
47.		Demonstration of packages with Exceptions	
48.		Implementation of Programs using Try and Catch	
49.		Demonstration of types of Exceptions	
50.		Demonstration of Java Practical Program 10: To handle Divide by Zero Exception.	
51.	5	Demonstration of Threads	LCD Projector
52.		Demonstration of Multithreading	
53.		Implementing sample programs using Threads	
54.		Demonstration of Threads with Exceptions	
55.		Demonstration of Java Practical Program 11: To explain the multithreading with the use of Multiplication tables. Three threads must be defined. Each one must create one multiplication table, they are 5 table, 7 table and 13 table.	
56.	5	Demonstration of Files with sample programs	LCD Projector
57.		Demonstration of types in Files	
58.		Implementing File class methods	
59.		Demonstration of File operations	
60.		Demonstration of Java Practical Program 12: To display all Prime numbers between two limits using File Concept.	
61.	5	Demonstration of I/O in Files	LCD Projector
62.		Demonstration of Streams in Java	
63.		Implementation of Byte Streams	
64.		Implementation of Character Streams	
65.		Demonstration of Java Practical Program 13: To implement the concept of Concatenating and Buffering files in Java.	
66.	5	Demonstration of Swings with sample program	LCD Projector
67.		Demonstration of Swing with GUI	
68.		Demonstration of Swing Components	
69.		Implementation of AWT and Swing	

70.		Demonstration of Java Practical Program 14: To add Items and Remove items using Swing Components.	
71.		Demonstration of Trees sample program	
72.		Demonstration of Types of Trees	
73.		Implementing storage of Trees	
74.	5	Demonstration of Hierarchical structure of Tree	LCD Projector
75.		Demonstration of Java Practical Program 15: To implement the concept of Trees in Java	

Total Hours: 75

A. Immaculate
Signature of the Staff

[A. IMMACULATE]

R. Karthik
Signature of the HoD

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Approved
6.3.22

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LESSON PLAN

Department of Computer Applications (BCA)

Batch : 2019 -2022

Semester : VI (EVEN)

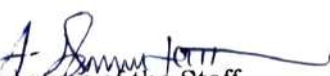
Name of the Staff : Dr.A.Indumathi

Name of the Subject: Linux Programming Lab (19UCA6S3)

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT/FLIPPED CLASS etc
1	1	Basic linux commands	Demonstration
2	1	Working with editors	Execution and Error correction
3	1	Prog 1: Shell Program to display Address	Execution and Error correction
4	1	Vi editor commands	Execution and Error correction
5	1	Simple operation using operator	Execution and Error correction
6	1	Prog 2: Arithmetic operations using Shell Concept	Execution and Error correction
7	1	Looping concept in linux	Stimulating thought through discussion and encourage them to execute independent program
8	1	Simple programs using loop concept	Execution and Error correction
9	1	Prog 3: Print different patterns using looping concept	Execution and Error correction
10	1	Learning read and write statement	Stimulating thought through discussion and encourage them to execute independent program
11	1	Simple program using read , write command	Execution and Error correction
12	1	Prog 4: Perform simple inventory control operation using read statement	Execution and Error correction
13	1	Controls and its usage	Stimulating thought through discussion and encourage them to execute independent program
14	1	Simple program using Controls	Execution and Error correction
15	1	Prog 5: Prepare Student mark statement using controls	Execution and Error correction
16	1	Sorting techniques	Stimulating thought through discussion and encourage them to execute independent program
17	1	Sorting the numbers in ascending order	Execution and Error correction

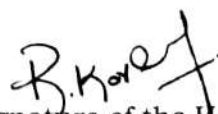
18	1	Prog 6: Sort the given numbers in both ascending and descending orders.	Integrating ascending order sorting with descending order and Executing, Error correction
19	1	Defining and executing function	Stimulating thought through discussion and encourage them to execute independent program
20	1	Simple program using function	Execution and Error correction
21	1	Prog 7: Shell program to perform user defined function concept	Execution and Error correction
22	1	Purpose of Utility concept	Stimulating thought through discussion and encourage them to execute independent program
23	1	Sample Shell program	Execution and Error correction
24	1	Prog 8: Shell program using dialog utility concept	Execution and Error correction
25	1	File operation basics	Stimulating thought through discussion and encourage them to execute independent program
26	1	Sample file program	Execution and Error correction
27	1	Prog 9: Perform file operation	Execution and Error correction
28	1	Introduction to shell Scripts	Stimulating thought through discussion and encourage them to execute independent program
29	1	Simple program using scripting concept	Execution and Error correction
30	1	Prog 10: Shell Script to print "Hello Linux" message in Bold, Blink and in different colors	Execution and Error correction

Total Hours: 30


Signature of the Staff

[Dr. A. INDUMATHI]


05.8.22


Signature of the HoD

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LESSON PLAN

Department of Computer Applications

Batch: 2019 - 2022

Semester: VI

Name of the Staff: S. NANDHINESWARI

Name of the Subject: Information security - 19UCA614

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT/FLIPPED CLASS etc
UNIT-I [17 hrs]			
1	2	Is there Security Problem in Computing	CHALK & TALK
2	1	What does Security mean	CHALK & TALK
3	2	Attacks	CHALK & TALK
4	2	The Meaning of Computer Security	CHALK & TALK
5	2	Computer Criminals	CHALK & TALK
6	2	Protection in general purpose operating systems	CHALK & TALK
7	2	Memory and Address Protection	CHALK & TALK
8	2	File Protection Mechanisms	CHALK & TALK
9	2	User Authentication	CHALK & TALK
UNIT-II [19 hrs]			
10	1	Program Security	CHALK & TALK
11	1	Non malicious Program Errors	CHALK & TALK
12	2	Viruses and other Malicious Code	CHALK & TALK
13	1	Kinds of Malicious code	CHALK & TALK
14	2	how viruses attach, Home for virus	CHALK & TALK
15	1	Virus Signature	CHALK & TALK
16	2	Example of malicious codes: Brain Virus, Worm, Code red, Web bugs.	CHALK & TALK
17	2	Targeted Malicious Code	CHALK & TALK
18	1	Trojans, Trap door	CHALK & TALK, ppt

19	1	Salami attack	CHALK & TALK, ppt
20	1	Keystroke Logging	CHALK & TALK
21	2	Timing attacks	CHALK & TALK
22	2	Controls against Program Threats: Developmental controls	CHALK & TALK
UNIT-III [16 hrs]			
23	2	Database and Data Mining Security	CHALK & TALK
24	1	Data Mining Security	CHALK & TALK
25	2	Introduction to Databases	CHALK & TALK
26	2	Security Requirements	CHALK & TALK
27	2	Reliability and Integrity	CHALK & TALK
28	2	Multilevel Databases	CHALK & TALK, ppt
29	2	Proposals for Multilevel Security	CHALK & TALK
30	1	Separation	CHALK & TALK
31	2	Data Mining	CHALK & TALK
UNIT-IV [19 hrs]			
32	2	Security in Networks	CHALK & TALK
33	1	Network Concepts	CHALK & TALK
34	2	Threats in Networks	CHALK & TALK
35	1	Categories of Attack	CHALK & TALK

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT/FLIPPED CLASS etc
36	2	Who attacks networks?	CHALK & TALK
37	1	Reconnaissance	CHALK & TALK
38	1	Pinging	CHALK & TALK, ppt
39	1	Threats in transit	CHALK & TALK
40	2	Eavesdropping and wiretapping	CHALK & TALK
41	1	Software based packet sniffing	CHALK & TALK
42	1	Tools ,Microwave	CHALK & TALK
43	2	Firewalls	CHALK & TALK
44	2	Intrusion Detection Systems	CHALK & TALK
UNIT-V [19 hrs]			
45	2	Legal and Ethical Issues in Computer Security	CHALK & TALK
46	1	Protecting Programs and Data	CHALK & TALK
47	2	Information and the Law	CHALK & TALK
48	1	Computer Crime	CHALK & TALK
49	2	Why computer crime is hard to prosecute	CHALK & TALK
50	1	Examples of Statutes	CHALK & TALK
51	2	Cyber pornography	CHALK & TALK
52	2	Accessing protected system	CHALK & TALK
53	1	Tampering with source code	CHALK & TALK
54	1	Cryptography and the law	CHALK & TALK
55	1	Case studies of Ethics	CHALK & TALK

56	2	Privacy rights, Fraud	CHALK & TALK
57	1	Ownership of programs.	CHALK & TALK

Total Hours: 90

S. Nandhini

Signature of the Staff

[S. NANDHINIESWARI]

Approved

05.3.22

R. Karthik

Signature of the HoD

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