

Teaching Plan

Name of the Faculty : **Dr. Anjali Thukral**

Name of the Course : **B.Sc. (H) Computer Science**

Semester : **4** Sec (if any) : **A** Session: **2015-16**

Title of the Paper : **Software Engineering**

Month	Topics Covered	References
Jan	Introduction, Requirement Analysis, Data Engineering (Function Oriented Design)	1, 2
Feb	Software Metrics, Estimation and Scheduling, Risk Management	1
March	Data Engineering (Architectural Design), Testing	1, 2
April	Testing (cont.), Quality	1

The tentative dates for:

Assignment submission: **28th January 2016**

Test: **25th February 2016**

Practical schedule (At least two rounds of individual team discussion with the concerned teacher are expected before each of the following submissions)

Concepts	Deadline
Problem St.	14 th January 2016
Process Model	21 st January 2016
DFD+DD	4 th February 2016
FP	11 th February 2016
Efforts	18 th February 2016
Timeline	25 th February 2016
Risk Table	3 rd March 2016
Design	10 th March 2016
Data Design	24 th March 2016
Code	31 st March 2016
Testing	7 th April 2016

Teaching Plan

Name of the Faculty: Nidhi Passi

Name of the Course: B.Sc.(G) Mathematical Science

Semester : IV Sec (if any): --

Title of the Paper : Operating Systems

Month	Topics Covered	References
January	<p>Chapter1 (Introduction) 1.1, 1.4-1.11</p> <p>Chapter5(ProcessScheduling) 5.1 - 5.3</p> <p>Chapter6(Synchronization) 6.1-6.2</p> <p>Practical- Usage of Unix commands, editors, execution and Interface</p>	<p>A Silberschatz, P.B. Galvin, G. Gagne, Operating Systems Concepts, 8th Edition, John Wiley Publications</p> <p>The Unix programming Environment by B.W. Kernighan & R.Pike</p>
February	<p>Chapter8(MemoryManagementStrategies) 8.1 – 8.4(upto 8.4.2),8.6</p> <p>Chapter 9(Virtual Memory Management) 9.1 – 9.2,9.4(9.4.1-9.4.3)</p> <p>+ Test (11th Feb)</p> <p>Practical- based on CPU Scheduling Algorithms</p>	<p>A Silberschatz, P.B. Galvin, G. Gagne, Operating Systems Concepts, 8th Edition, John Wiley Publications</p>
March	<p>Chapter 2(System Structures)2.1 – 2.5, 2.7(2.7.1-2.7.3)</p> <p>Chapter 3(Process Concept) 3.1 - 3.3</p> <p>Chapter4(MultithreadedProgramming)4.1</p> <p>+Test (17th March) +Assignment (21st March)</p> <p>Practical- based on memory allocation algorithms</p>	<p>Based on theory</p> <p>A Silberschatz, P.B. Galvin, G. Gagne, Operating Systems Concepts, 8th Edition, John Wiley Publications</p> <p>Based on theory</p>
April	<p>Chapter 10(File System)10.1–10.3, 10.6</p> <p>Chapter11(ImplementingFileSystems)11.1, 11.4 – 11.5</p> <p>+ Revision</p>	<p>A Silberschatz, P.B. Galvin, G. Gagne, Operating Systems Concepts, 8th Edition, John Wiley Publications</p>

Teaching Plan

Name of the Faculty: Sumit Kumar Baberwal

Name of the Course: B.Sc. (H) Computer Science

Semester : IV sem Sec (if any) : Section A & B

Title of the Paper : Data Communication and Computer Networks

Month	Topics Covered	References
January	<p>Theory:- <u>Introduction to Computer Networks:- Chapter 1,2</u> <u>Data Communication Fundamentals and</u> <u>Techniques(Chapter 3,4,5 & 6):- Analog & Digital</u> Signals, periodic & non-periodic signals, data rate, line coding schemes, analog-digital conversion, digital-analog conversion, multiplexing</p> <p>Practical: - Implementation of CRC-12 for noiseless & noisy channel.</p> <p>Test1</p>	<p>1) Data Communication & Networking: B.A.Frouzan, 4th Edition, TMH, 2007</p>
February	<p>Theory:- <u>Data Communication Fundamentals and</u> <u>Techniques(Chapter 7):- guided & unguided media</u> <u>Network Switching Techniques and Access</u> <u>Mechanisms(Chapter 9)</u> <u>Data Link Layer Functions and Protocol(Chapter 3)</u> <u>Multiple Access Protocol and Networks (Chapter 4)</u></p> <p>Practical:- 3 & 4 from program list</p>	<p>1) Data Communication & Networking: B.A.Frouzan, 4th Edition, TMH, 2007</p> <p>2) Computer Networks: A.S.Tanenbaum, 4th Edition, Pearson Edu, 2003.</p>
March	<p>Theory:- <u>Multiple Access Protocol and Networks(Chapter 4)</u> <u>Networks layer Functions and Protocols(Chapter 5)</u></p> <p>Practical:- 5 & 6 from program list</p> <p>Test2</p> <p>Assignment</p>	<p>1) Computer Networks: A.S.Tanenbaum, 4th Edition, Pearson Edu, 2003.</p>
April	<p>Theory:- <u>Transport layer Functions and Protocols(Chapter 6)</u> <u>Overview of Application layer Protocol(Chapter 7)</u></p> <p>Practical:- 7 from program list</p> <p>Test 3</p> <p>Remaining topics, if any & revisiion</p>	<p>1) Computer Networks: A.S.Tanenbaum, 4th Edition, Pearson Edu, 2003.</p>

Teaching Plan

Name of the Faculty: Dr.G.Uma Vetri Selvi

Name of the Course: B.Sc(H) Computer Science

Semester : IV Sec (if any): B

Title of the Paper : **Software Engineering (Practical)**

Month	Topics Covered	References
January	Problem Statement, Software Requirement Specification,	
February	Estimations, Scheduling,Risk Management	R.S. Pressman, Software Engineering: A Practitioner's Approach, McGraw-Hill, Ed 7, 2010.
March	Design,Coding	P. Jalote, An Integrated Approach to Software Engineering, Narosa Publishing House,Ed.3, 2011.
April	Testing, Report Submission and Mock Presentation	

Note : The tentative date of Assignment/test/Project may also be provided.

The schedule of Practical may also be provided

Teaching Plan

Name of the Faculty: Dr.G.Uma Vetri Selvi

Name of the Course: B.Sc(H) Computer Science

Semester : IV Sec (if any): B

Title of the Paper : **Software Engineering**

Month	Topics Covered	References

January	The Characteristics & Nature of Software, Process Models, Agile Development, Software Process Improvement, Software Requirements Analysis and Specification	
February	Empirical Estimation models, Project Scheduling, Risk Management Assignment : 1 and Test :1	R.S. Pressman, Software Engineering: A Practitioner's Approach, McGraw-Hill, Ed 7, 2010.
March	Function Oriented Design, Architectural Design, Achieving software Quality, Review Techniques, Software Quality Assurance.	P. Jalote, An Integrated Approach to Software Engineering, Narosa Publishing House, Ed.3, 2011.
April	Software Testing Strategies, Testing Conventional Applications, Product Metrics, Process and Project Metrics + Revision Assignment : 1 Test :1	

Note : The tentative date of Assignment/test/Project may also be provided.

The schedule of Practical may also be provided

Teaching Plan

Name of the Faculty : Ms Richa Gupta

Name of the Course : BSc (Hons) Computer Science

Semester : IV Sec (if any) : B

Title of the Paper : Operating Systems (Theory)

Month	Topics Covered	References
January	Chapter 1, 2, 3, 5	A. Silberschatz, P.B. Galvin, G. Gagne, Operating System Concepts, 9 th edition,
February	Chapter 4, 6, 7, 8	
March	Chapter 9,10,11,12	
April	Chapter 15	
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January	Assignment 1	In addition to above Case study ppt will be taken throughout the semester.
February	Test 1, Assignment 2	
March	Test 2, Revision Test series	

Title of the Paper : Operating Systems (Practical)

Month	Topics Covered	References
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January	Familiarity with Unix commands and vi editor, Q4 and 5	1. Unix shell programming by Yashwant Karnatkar 2. A. Silberschatz, P.B. Galvin, G. Gagne, Operating System Concepts, 9 th edition,
February	Q 8, 6, 7	
March	Chapter 9,10, 1,2,3	
April	Mock viva	
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	All the above programs will have a start and completion date and your internal assessment will be marked accordingly.	