

**CS- 602 : Distributed and Cloud Computing System (Core Subject) First Semester**

**Textbook** : Distributed Systems Concepts and Design (Fifth Edition) By George Coulouris, Jean Dollimore, Tim Kindberg

**Period** : 45 periods for 15 weeks

No.	Chapter	Page	Period	Detail Lecture Plan
<b>I.</b>	<b>Chapter 12 Distributed File Systems</b>	521 to 564	<b>10</b>	
1	12.1 Introduction 12.1.1 Characteristics of file systems 12.1.2 Distributed file system requirements 12.1.3 Case studies	521 -530	2	<b>Lectures+ Assignment</b>
2	12.2 File service architecture	530 -536	2	
3	12.3 Case study: Sun Network File System	536 -547	2	
4	12.4 Case study: The Andrew File System	548-567	2	
5	12.5 Enhancements and further developments	567-562	1	
6	Discussion		1	
<b>II.</b>	<b>Chapter 13 Name Services</b>	565 to 594	<b>8</b>	
7	13.1 Introduction	565-569	1	<b>Lectures+ Assignment</b>
8	13.2 Name services and the Domain Name System	569-583	1	
9	13.3 Directory services	584	2	
10	13.4 Case study: The Global Name Service	585-588	3	
11	13.5 Case study: The X.500 Directory Service	588-592		
12	Discussion		1	
<b>III.</b>	<b>Chapter 14 Time and Global states</b>	595 to 628	<b>9</b>	
13	14.1 Introduction	595-597	2	<b>Lectures+ Assignment</b>
14	14.2 Clocks, events and process states	597-599		
15	14.3 Synchronizing physical clocks	599-607	3	
16	14.4 Logical time and logical clocks	607-610	2	
17	14.5 Global states	610-619		
18	14.6 Distributed debugging	625	1	
19	Discussion		1	
<b>IV.</b>	<b>chapter 16 Transactions and Concurrency Control</b>	675 to 726	<b>7</b>	
20	6.1 Introduction	675-679	2	<b>Lectures+ Assignment</b>
21	16.2 Transactions	679-690		
22	16.3 Nested transactions	690-692	1	
23	16.4 Locks	692- 707	1	
24	16.5 Optimistic concurrency control	707-711	1	
25	16.6Timestamp ordering	711-718	1	
26	16.7Comparison of methods for concurrency	718-720		

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	control			
26	Discussion		1	
27	<b>Chapter 17 Distributed Transactions</b>	727 to	<b>4</b>	
28	17.1 Introduction	728	1	<b>Lectures+ Assignment</b>
29	17.2 Flat and nested distributed transactions	728-731		
30	17.3 Automatic commit protocol	731-740		
31	17.4 Concurrency control in distributed transactions	740-743		
32	Discussion		1	
33	Presentation		<b>7</b>	

**URL - <http://www.cdk5.net/wp/>**

**Assessment**

Exam	70 %
Attendance / Quiz	10 %
Tutorial /Assignment	10 %
Presentation	10 %