**Course Log Template**

FAST-National University of Computer and Emerging Sciences

**INSTITUTION**

BS (CS)

**PROGRAM (S) TO BE**

**EVALUATED**

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| --- | --- | --- | --- | --- | --- |
| **Course Name** | | | **CS 3001 Computer Networks** | | |
| **Catalog Number** | | |  | | |
| **Instructor Name** | | |  | | |
|  | | |  | | |
| **Week** | **Duration** | **Topics Covered** | | **Evaluation Instruments used** | **Signature** |
| **1.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 1.1 - Introduction, Course  L2: 1.2-1.3 - Network Edge, Network Core (ISPs, internet Vs. intranet, Internet)  L3: 1.4 - ISPs and Internet Backbones (Tiers of ISPs), Delay, Loss and Throughput in Packet- Switched Networks | |  |  |
| **2.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 1.5 - Protocol Layers, Service Model  L2: 1.6-1.7 Network Under Attacks, History  L3: 2.1 Principles of network Applications | |  |  |
| **3.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 2.2 - Web and HTTP  L2: 2.3-2.4 Electronic Mail and DNS  L3: 2.5 – P2P Distributions | |  |  |
| **4.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 2.6 Video Streaming and Content Distribution  L2-L3: 3.1-3.2 – Transport Layer service, Multiplexing and De-multiplexing | |  |  |
| **5.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 3.3 – Connectionless Transport UDP  L2-L3: 3.4 – Principles of Reliable data transport | |  |  |
| **6.** | **1 Hour** | **Midterm # 1** | |  |  |
| **7.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1-L2: 3.5 Connection Oriented Transport: TCP  L3: Exam Review | |  |  |
| **8.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1-L2: 3.6 Principles of Congestion Control  L3: 3.7 - TCP Congestion Control | |  |  |
| **9.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 4.1 – Network Layer Overview  L2: 4.2 – What’s Inside a Router  L3: 4.3 – Internet Protocol | |  |  |
| **10.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1-2: 4.3 – Internet Protocol Continued  L3: 4.4 Generalized Forwarded and SDN and  4.5 – Middle Boxes | |  |  |
| **11.** | **1 Hour** | **Midterm # 2** | |  |  |
| **12.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1-2: 5.1-5.3 – Routing Algorithms and Intra-AS routing  L3: Exam Review | |  |  |
| **13.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1-2-3: 5.4. Routing Amount the ISP | |  |  |
| **14.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 5.5 – SDN Control Plane  L2: 5.6 - ICMP  L3: 5.7 – Network Management | |  |  |
| **15.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | L1: 6.4 – Switched LANs  L2: 6.5 - Link virtualization  L3: 6.6-6.7 – Data Center Networking | |  |  |
| **16.** | L1 = 1 hour  L2 = 1 hour  L3 = 1 hour | Course wrap-up and Project evaluations | |  |  |

Instructor Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Instructor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_