

Class Schedule - Summer 2018

Week #	Date Range	Lesson	Reading	Task Assigned	Task Due Date	Schedule Notes
1	5/14/2017- 5/20/2017	1 - Introduction 2 - Architecture and Principles	How To Read a Paper (Optional) Design Philosophy of DARPA Internet Protocols	P1 - VM Setup, Topologies, Simulating Networks		
2	5/21/2017- 5/27/2017	3 – Switching 4 – Routing	End to End Arguments in System Design BGP Routing Policies in ISP Networks	P2 - Spanning Tree Protocol	P1 - 5/26 23:59 AOE	
3	5/28/2017- 6/3/2017	5 - Naming, Addressing, Forwarding 5.1 - Router Design Basics 5.2 - DNS	Are we there yet? 20 years of IPV6 (Optional)		P2 - 6/2 23:59 AOE	
4	6/4/2017- 6/10/2017	Test 1	Test 1 Preparation Questions	Discussion Thread 1	Test 1 window: 6/4 - 6/9	
5	6/11/2017- 6/17/2017	6 - Rate Limiting and Traffic Shaping	Sizing Router Buffers (Sections 1-4) Controlling Queue Delay	P3 - Congestion Control and Buffer Bloat		

6	6/18/2017- 6/24/2017	7 - Congestion Control and Streaming	CUBIC Congestion Control (Sections 1-3, 5) TCP Fast Open (Sections 1-4, 6-7) Application Flow Control in YouTube Video Streams MPTCP (Video)		P3 - 6/23 23:59 AOE	
7	6/25/2017- 7/1/2017	8 – Content Distribution 9 - Software Defined Networking	Jellyfish (Skip sections: 4.2.LEGUP, 6.2-6.3) Portland (Skip sections 3.7, 4) The Road to SDN: An Intellectual History of Programmable Networks	P4 - SDN Firewall		Withdrawal deadline: 6/30
8	7/2/2017- 7/8/2017	9.1 - Programming SDNs 10 - Traffic Engineering	Modular SDN Programming with Pyretic	Discussion Thread 2	P4 - 7/7 23:59 AOE	
9	7/9/2017- 7/15/2017	11 - Network Security	BGP and Bulletproof Hosting Networks How Secure are Secure Interdomain Routing Protocols	P5 - BGP Hijacking Attacks + Extra Credit Project		

10	7/16/2017- 7/22/2017	11.1 - Internet Worms 11.2 - Spam 11.3 - Denial of Service Attacks	Hold-On: Protecting Against On-Path DNS Poisoning Crossfire Attack	Discussion Thread 3	P5 + Extra Credit Project 7/21 23:59 AOE	
11	7/23/2017- 7/29/2017	Test 2	Test 2 Preparation Questions		Test 2 window: 7/26 - 8/2	Final Instructional Days: 23-24 July Finals week: 26 July – August 2
12	7/30/2017- 8/5/2017	Course Feedback				August 6: Grades Due

Lesson Transcripts

Transcripts for the videos can be found [here](#).

Project Instructions

Projects will be released and turned in via Canvas. The project description, instructions for completion, and instructions for turn-in will be posted on Canvas.

Test Preparation Questions

Test preparation questions are ungraded. They are available through the Canvas. Feel free to discuss these questions on Piazza with your fellow classmates. Solutions will be posted the week of their associated testing window to help you study the model answers.