Course	**CS 6301.009, Advanced Topics in Virtualization**
Professor	Sridhar Alagar
Term	Spring 2019
Meetings	MW 11:30 to 12:45 PM ECSW 1.355

Professor's Contact Information

Office Phone	(972) 883-6131
Other Phone	(972) 883-2185 (CS Department Phone Number)
Office Location	ECSS 2.603
Email Address	sridhar@utdallas.edu
Office Hours	TBA
Other Information	

General Course Information

Pre-requisites, Co-requisites, & other restrictions	Pre-requisites: CS 5348 Operating Systems or equivalent, programming skills in C, socket programming skills, and working knowledge of a UNIX-based operating system.
Course Description	This course will introduce students to various topics such as Virtual Machines, CPU Virtualization, Memory Virtualization, I/O Virtualization, Security in VM, Containers (Dockers), Lightweight Virtualization, Kubernetes, Serverless, and Unikernels. There will be few programming assignments related to virtualization, VMM, Dockers, etc. There will also be an open project, and a paper presentation.
Learning Outcomes	
Required Texts & Materials	Hardware and Software Support for Virtualization, Edouard Bugnion, Jason Nieh, and Dan Tsafrir, *Synthesis Lectures on Computer Architecture*, Morgan & Claypool Publishers, February 2017 (PDF version available for free).We will also use a collection of research papers.
Suggested Texts, Readings, & Materials	None.

Assignments & Academic Calendar TBA

Course Policies

Grading (credit) Criteria	40% programming assignments, 30% open project, 20% paper presentation, and 10% class participation
Make-up Exams	N/A
Extra Credit	No extra credit work will be assigned.
Late Work	Programming projects submitted after the due date will be penalized at the rate of 10% of the total credit for that project for every day (not including weekends and holidays) by which they are late. Late submissions will not be accepted once the solution has been discussed in class and the graded submissions have been returned.
Class Attendance	As per the Department of Computer Science policy, three consecutive absences lead to one letter grade drop. Four consecutive absences lead to a F.
Classroom Citizenship	The instructor encourages students to take active part in class discussions. No question is too simple/stupid to be asked. So, do not hesitate.

Comet Creed	*This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:* *"As a Comet, I pledge honesty, integrity, and service in all that I do."*
UT Dallas Syllabus Policies and Procedures	*The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.* *Please go to http://go.utdallas.edu/syllabus-policies for these policies.*

These descriptions and timelines are subject to change at the discretion of the Professor.