



香港中文大學

The Chinese University of Hong Kong

CSCI5550 Advanced File and Storage Systems

Literature Survey Presentation



CSCI5550 Course Schedule



	W	Date	Lecture	Suggested Readings	Tutorial
BASIC	1	Jan 6, 7	Lec01: I/O Devices	<i>OSTEP 36, 37</i>	-
	2	Jan 13, 14	Lec02: RAID and Data Integrity	<i>OSTEP 38, 45</i>	-
	3	Jan 20, 21	Lec03: File System Basics	<i>OSTEP 39~42</i>	-
	4	Jan 27, 28	Lunar New Year Vacation	No class	-
	5	Feb 17, 18	Lec03: File System Basics	<i>OSTEP 39~42</i>	-
	6	Feb 24, 25	Lec04: File System Designs	<i>OSTEP 43, FAT, Ext4</i>	HW1 Released
ADVANCED	7	Mar 2, 3	Lec05: Distributed File Systems	<i>OSTEP 49, GFS, Ceph</i>	(online Q & A)
	8	Mar 9, 10	Lec06: Solid-State Drives	<i>F2FS</i>	(online Q & A)
	9	Mar 16, 17	Lec07: New Hard Disk Drives	<i>SMR, IMR</i>	(online Q & A)
	10	Mar 23, 24	Lec08: Memory Storage	<i>NVM, PMFS, UBJ</i>	HW1 Due
	11	Mar 30, 31	Lec08: Memory Storage (Cont'd)	<i>LevelDB, WiscKey</i>	-
	12	Apr 6, 7	Lec09: Advanced Storage Systems	<i>GraphChi, FlashGraph</i>	HW2 Released
	13	Apr 13, 14	Easter / Survey Presentation		(online Q & A)
	14	Apr 20, 21	Literature Survey Presentation		(online Q & A)
	15	Apr 27, 28	Literature Survey Presentation		(online Q & A)
✘	May 12	Group-based Research Proposal Due & Individual HW2 Due			

Literature Survey Presentation



- We will have **survey presentations** during the **lecture sessions** in the weeks of *April 13, 20, and 27*.
 - All the presentations will be held **online** via ZOOM.
- It is a **group-based** presentation:
 - A group can be composed of **“at most” two** students.
 - Each group will be given a **20-minute time slot** for the presentation (not including the Q & A).
 - We will conduct a fair, random process to determine the order.
 - The presentation order and time slots for each group will be announced later via the [course website](#) and the [blackboard](#).
 - Every group **MUST** give the presentation based on the released time slot, and control your presentation time well.
 - There would be **NO** chance to have a make-up presentation.
- *Note: The specification of **research proposal** will be posted later.*

Paper Selection Policy



- Please pick **one paper** published in the following top conferences **within the past 3 years (2017~2020)**:
 - ACM ASPLOS, ACM EuroSys, ACM SOSP, USENIX ATC, USENIX FAST, and USENIX OSDI.
- The topic **must be** related to file and storage systems.
 - Only regular, long paper can be selected.
 - Papers discussed in lectures **cannot** be selected.
- To control the quality of presentations, please first **email** your paper title to our TA **by April 6, 2020**.
 - Use the email title: “*CSCI5550_Paper_Selection_Group_ID*”
 - You will get a reply from TA about:
 - Whether the selected paper is eligible, and
 - Whether the paper has been selected by others (on a **FCFS basis**).

(Suggested) Presentation Structure



- You are *suggested* to organize your presentation to cover (but not limited to) the following points:
 - **Summary.** What are the major issues addressed in the papers? Do you consider them important? How the state-of-the-art designs resolved the issues? What are the new solutions and findings of the paper?
 - **Strengths.** What are the strengths of the papers? Are there any reasons why the papers should be accepted?
 - **Weaknesses.** What are the weaknesses of the papers? Are there impractical assumptions made in the papers? Are there any reasons why the papers should NOT be accepted?
 - **Improvements.** What are the potential research issues that can further improve or extend the paper?

Group List



Group ID	Student #1	Student #2	Group ID	Student #1	Student #2
1	1155092193	1155116771	11	1155095176	
2	1155076813		12	1155135538	1155136646
3	1155116219		13	1155136640	
4	1155135534		14	1155090087	1155136883
5	1155130026		15	1155137827	
6	1155092207		16	1155136637	1155077547
7	1155062141	1155120879	17	1155135537	1155140307
8	1155135535	1155135539	18	1155107965	1155107964
9	1155061912	1155128181			
10	1155086091	1155130024			