

Instructor: Jannatun Noor, jannatun.noor [at] bracu.ac.bd

Lecture Times:

Monday, Wednesday 11:00 - 12.30 PM, 09H-37C

Sunday 11.00 am - 1.50 pm

Office Hours

Jannatun: Mon - 2-3:30 PM; Mon, Wed - 8-9:30AM

Grading (*subject to change if necessary*)

Class activities - 10

Mid quiz / Midterm - 10

Final quiz - 10

Paper presentation - 10

Mid project update / Lab Mid - 10

Final project submission + report in latex - 10

Five Assignments [All will be counted] - 30

Lab Viva - 10

Lecture #	Topic	Reading	Assignment
1	Course Introduction		
2	Characteristics of Cloud computing	https://www.synopsys.com/cloud/insights/essential-cloud-computing-characteristics.html#:~:text=The%20National%20Institute%20of%20Standards,rapid%20elasticity%2C%20and%20measured%20service.	
3	Deployment and service Model	https://www.google.com/amp/s/www.geeksforgeeks.org/cloud-deployment-models/amp/	A1

		https://www.guru99.com/cloud-service-models.html https://en.m.wikipedia.org/wiki/Timeline_of_Dropbox	
4	Virtualization Overview	https://www.google.com/amp/s/www.geeksforgeeks.org/virtualization-cloud-computing-types/amp/	
5	Virtualization Types	https://www.google.com/amp/s/www.geeksforgeeks.org/virtualization-cloud-computing-types/amp/	A1 Check A2
6	Containerization Overview	https://www.edureka.co/blog/docker-tutorial https://docs.docker.com/ https://www.edureka.co/blog/docker-architecture/	
7	Docker commands	https://www.quora.com/Whats-the-difference-between-Docker-Swarm-Docker-Compose-and-Docker-Networks https://www.edureka.co/blog/docker-commands/ https://training.play-with-docker.com/beginner-linux/#Task_0	A2 Check A3
8	Storage Systems	https://aws.amazon.com/what-is/cloud-storage/#:~:text=There%20are%20three%20main%20cloud,has%20its%20own%20use%20cases https://www.redhat.com/en/topics/data-storage/file-block-object-storage https://blog.purestorage.com/purely-informational/san-vs-nas-vs-das-whats-the-difference/#:~:text=The%20major%20differences%20between%20DAS,also%20used%20for%20transmitting%20data	

9	Distributed Hashing Ring	https://www.toptal.com/big-data/consistent-hashing (upto rehashing)	A3 Check
10	Consistent Hashing Ring	https://www.toptal.com/big-data/consistent-hashing (rest part/consistent hashing)	
11	The Evolution of Storage Swift's Data Model and Architecture	Book: OpenStack Swift - O'reilly Media inc. by J. Arnold - Chapter 1 and Chapter 2 (Swift's key characteristics, till page 17)	A4
12	Swift Basics	Book: OpenStack Swift - Chapter 3 (Upto Ring Basics: Hash-functions)	
13	Review and Wellbeing Class		A4 check
14	Mid Quiz/Midterm		
15	OpenStack Swift Basic -part 2	Book: OpenStack Swift - Chapter 3 (Ring Basics: Consistent Hashing Ring - rest)	A5
16	Swift installation	Book: OpenStack Swift - Chapter 9 or https://drive.google.com/drive/folders/1o4YzwI5I44IbqZKgE9VSzP6TXJ5chAK4 → Swift installation pdf	
17	OpenStack Component	https://www.javatpoint.com/openstack	A5 Check
18	Cache	https://www.javatpoint.com/memcached-tutorial https://www.dragonflydb.io/guides/memcached	
19	Broker		
20	RDBMS		
23	Discussion and Well-Being		Final Project Submission

24	Final		
----	--------------	--	--