

Course Syllabus



Course	MIS6363.501.25S
Course Title	Cloud Computing Fundamentals
Instructor	Kamal Nasir
Term	Spring 2025
Meetings	Wednesday 7:00pm-9:45pm JSOM 1.107

Instructor's Contact Information

Email Address kxn152930@utdallas.edu

Office Hours By Appointments. Please send me an email 24 hours in advance.

COURSE DESCRIPTION

This course is designed as a primer for cloud computing which many believe is the third major wave of computing, after mainframe and client-server computing.

The course examines this technology from a business perspective. The course is designed to deliver a holistic and balanced view of business models, technological infrastructure, and security issues of cloud computing useful for the technological student to understand the business challenges and the business student to understand the technology challenges.

Learning Outcomes

Completing this course will provide a good understanding of cloud computing foundation, services, and its best practices. I will be providing a solid foundation for business-related cloud-computing needs. After successfully finishing this class, you should be able to:

- Understand terms and methodologies with cloud design patterns.
- Identify the architecture and infrastructure of cloud computing.
- Explain Cloud framework and its components.
- Ability to implement, deliver and maintain cloud technology.
- Business considerations for moving to Cloud.

Required Tools: Laptop Required! - A significant amount of independent study will be required to succeed; therefore, a personal laptop is mandatory for this class.

Suggested Books:

1. Cloud Computing Design Patterns by Thomas Erl (several book vendors provide)
2. Cloud Computing (The MIT Press Essential Knowledge Series): The MIT Press Essential Knowledge Series Paperback – May 13, 2016, by Nayan B. Ruparelia, Ralph Retter, Walter Schupeak, Peter Arbitter
3. Cloud Governance and Management Made Simple –Lita Fulton

Schedule

The following is a tentative schedule, which will be followed as closely as possible. However, should any changes become necessary, then I will announce it in the class or via e-Learning. It is your responsibility to keep track of announcements regarding changes to this schedule.

	DATES	TOPIC/LECTURE
Week 1	Jan 22nd	Introduction to the Course Introduction to Cloud Computing
Week 2	Jan 29th	Virtualization Essentials Clouds Models Shared Responsibility
Week 3	Feb 5th	Quiz 1 Virtual Machines Portal Walkthrough Identify Workload and Scenarios Compute options
Week 4	Feb 12th	Quiz 2 Deploy and manage Azure compute resources VM deployment Billing
Week 5	Feb 19th	Quiz 3 Storage Services Disk Type and Comparison Introduction and creating Storage Account
Week 6	Feb 26th	Quiz 4 Manage Storage Account Storage Access Policy Life Cycle of Storage
Week 7	Mar 5th	Quiz 5 Implement and manage virtual networking Connecting to Cloud Best Practice and Tips for Networking
Week 8	Mar 12th	Mid Term

Week 9	Mar 19th	Spring Break - No class
Week 10	Mar 26th	High Availability/Scalability Availability Set/Load Balancer
Week 11	Apr 2nd	Quiz 6 App Services App Service Plan
Week 12	Apr 9th	Quiz 7 Databases in the Cloud Azure SQL Database
Week 13	Apr 16th	Quiz 8 Moving to Cloud Migration Tool Backup and Disaster Recovery
Week 14	Apr 23rd	Quiz 9 Manage Azure identities and governance Azure Policy
Week 15	Apr 30th	Quiz 10 Monitor and maintain Azure resources Automation
Week 16	May 7th	Final Exam

COURSE GRADING

- 8 Quizzes 40
- Assignments 20
- Midterm 20
- Final Exam 20

Percentage total Range (%)	Letter Grade
100 - 94	A
93 - 90	A-
89 - 87	B+
86 - 84	B
83 - 80	B-
79 - 77	C+
76 - 74	C
73 - 70	C-
Less than 70	F

* Please refer to <https://go.utdallas.edu/syllabus-policies> for University's syllabus policies and procedures.

* The descriptions and timelines contained in this syllabus are subject to change at the discretion of the instructor.

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.

Student Conduct & Discipline:

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable.

Academic Integrity

The faculty and administration of the School of Management expect from our students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. We want to establish a reputation for the honorable behavior of our graduates, which extends throughout their careers. Both your individual reputation and the school's reputation matter to your success.