

## Course Syllabus



**Course** MIS6363.005.24F  
**Course Title** Cloud Computing Fundamentals  
**Instructor** Kamal Nasir  
**Term** Fall 2024  
**Meetings** Friday 4:00pm-6:45pm JSOM 11.206

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### **Instructor's Contact Information**

**Email Address** [kxn152930@utdallas.edu](mailto: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	Aug 23rd	Introduction to Course Introduction to Cloud Computing
Week 2	Aug 30th	Virtualization Essentials Type of Clouds Shared Responsibility
Week 3	Sep 6th	Quiz 1 Portal Walkthrough Identify Workload and Scenarios Compute options Billing
Week 4	Sep 13th	Quiz 2 Virtual Machines Types of deployment VM deployment
Week 5	Sep 20th	Quiz 3 Storage Services Storage Redundancy Disk Type and Comparison Life Cycle of Storage
Week 6	Sep 27th	Quiz 4 Introduction to Storage Account Creating/Manage Storage Account Storage Access Policy
Week 7	Oct 4th	Quiz 5 Networking Connecting to Cloud Best Practice and Tips for Networking

Week 8	Oct 11th	Mid Term
Week 9	Oct 18th	Scalability Availability Set Load Balancer
Week 10	Oct 25th	Quiz 6 App Services App Service plan Deploying Web App
Week 11	Nov 1st	Quiz 7 Databases in the Cloud Azure SQL Family Deploy PaaS solutions with Azure SQL
Week 12	Nov 8th	Quiz 8 Moving to Cloud Migration Tool Backup and Disaster Recovery
Week 13	Nov 15th	Quiz 9 Governance Policy Identity and Access Management
Week 14	Nov 22nd	Quiz 10 Monitoring Automation Cloud Geography / Region
Week 15	Nov29th	Day after Thanksgiving (No Class)
Week 16	Dec 6th	Reading Day
Week 17	Dec 7th	5:00PM - 6:45PM Final Exam (Room JSOM 1.117)

## COURSE GRADING

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

\* 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.