

IS 460 Enterprise Cloud Computing

Spring Quarter 2024 Wednesdays 5:45-9:00pm CST

Location: LEWIS 01208 at Loop Campus

Course Description:

Cloud concepts, architecture and service management, with particular emphasis upon identifying and analyzing potential business applications of cloud computing. Students will conduct feasibility studies, detailing the advantages and disadvantages of implementing a cloud computing platform for specific applications with particular emphasis upon financial considerations, business benefits, and security risks. Students will develop the ability to evaluate alternatives and effectively argue in favor of their choices within the cloud computing knowledge domain. They will be able to define, apply and defend the need for standards and best practices. Students will work within a project team following the principles of project management to design, build and implement cloud applications.

Recommended Reading (Optional):

1. Cloud Computing Basics: A Non-Technical Introduction (2021) by Anders Lisdorf

Required Software:

1. AWS student account

Instructor Information:

Instructor: Kenneth Mroz

Email: kmroz2@depaul.edu

Office hours:

In-person:

4:30-5:20 before class every Wednesday

9:00-9:30 PM after class.

Virtual:

4:00-5:00 pm any day just send an email for confirmation. (Except Wednesdays)

Target Audience:

Our target audience is someone who wants to know the overview of cloud computing from the managerial perspective. They are expected to learn the managerial meaning of key concepts and use cases of computing service models and technology choices while having a high-level understanding of the technical complexities involved

Learning Outcomes:

Upon completion of the course, students will be able to:

- Explain key terms of cloud computing to people with non-IT background
- Define pros and cons of using Cloud technologies
- Understand different areas in cloud computing

Grading (all due dates per d2l):

Activity	Count	Details	Weight
Assignments	~ 8	Read case study and post on Discussion Forum	20 %
Quizzes	~ 8	1 every week Due before next class	10 %
Exams	1	Midterm	30%
Final	1	Final project	40 %

Below grading scale is directional – curve may be considered by faculty depending on the distribution of grades.

A	93-100	C+	77-79
A-	90-92	C	73-76
B+	87-89	C-	70-72
B	83-86	D+	67-69
B-	80-82	D	60-66

Assignments:

Week	Topic
1 04/03/2024	Overview of Cloud Computing, Vendors, Cloud responsibility, Types of Cloud Deployments, Types of services, Case Study
2 04/10/2024	DevOps, Platform Engineering, CICD, SRE, Examples, Case Study
3 04/17/2024	Cloud Storage Models, Management of storage, Relational Databases, Non-relational, Operating Databases, Simple Storage, Vendor examples, Case Study
4 04/24/2024	Cloud Networking, Cloud Security, High Availability, Disaster Recovery, Midterm review
5 05/01/2024	Midterm
6 05/08/2024	Cloud Native, Application Development, Serverless, APIs, Containers, Case Study
7 05/15/2024	Cloud data warehouse and Analytics, AI, Case Study, Prep for Lab
8 05/22/2024	AWS LAB
9 05/29/2024	Cost Management, Migrating to Cloud, Final review, Case Study
10 06/05/2024	Course Summary, Review for Final, Final Case Study
11 06/12/2024	Final

**Each Case study can be found in the weeks D2I sub folder.*

** Topics may change, but I will make an announcement if they do*

Course Policies

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Respect for Diversity and Inclusion at DePaul University as aligned with our Vincentian Values

At DePaul, our mission calls us to explore “what must be done” in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student’s identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see <https://resources.depaul.edu/teaching-commons/teaching/Pages/onlineteaching-evaluations.aspx> for additional information.

Academic Integrity and Plagiarism:

This course will be subject to the university’s academic integrity policy. All students are expected to abide by the University’s Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity.

More information can be found at:

<https://resources.depaul.edu/teachingcommons/teaching/academic-integrity/Pages/default.aspx>

Posting work on online sites, such as Hero

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Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for

enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment,

withdrawal, grading and incompletes can be found at:

<http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

Incomplete Grades

An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course

requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete

requests must be approved by the instructor of the course and a CDM Associate Dean.

Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at

<http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

Preferred Name & Gender Pronouns

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their

gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the

Student Preferred Name and Gender Policy at
<http://policies.depaul.edu/policy/policy.aspx?pid=332>

Students with Disabilities

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus (312) 362-8002
- Lincoln Park Campus (773) 325-1677
- Email: csd@depaul.edu

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.

Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.