

CSCI 5902 Adv. Cloud Architecting
Fall 2023
Instructor: Dr. Lu Yang

Week 1 - Course Introduction
Sep 8, 2023

CSCI 5902 Adv. Cloud Architecting



Course Overview

Introduction

The trend

Are you prepared?

- Cloud courses
- Cloud certifications
- Cloud career path

Syllabus

How do we work together

- Teaching
- Learning

Course Overview – Introduction



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Difficulty level: low to medium

AWS level: SAA

Materials: AWS Academy + A lot of materials

Characteristics: labs

Self-learning

challenging

→ scenario based

Optimization

no/less programming

- a lot of details

sometimes boring

support materials

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Gartner Survey (Apr 19, 2023)

Worldwide end-user spending on public cloud services is forecast to grow **21.7%** to total **\$597.3** billion in 2023, up from **\$491** billion in 2022.

All segments of the cloud market are expected see growth in 2023. Infrastructure-as-a-service (**IaaS**) is forecast to experience the **highest** end-user spending growth in 2023 at **30.9%**, followed by platform-as-a-service (PaaS) at 24.1%

Worldwide Public Cloud Services End-User Spending Forecast (Millions of U.S. Dollars)

	2022	2023	2024
Cloud Application Infrastructure Services (<u>PaaS</u>)	111,976	138,962	170,355
Cloud Application Services (<u>SaaS</u>)	167,342	197,288	232,296
Cloud Business Process Services (<u>BPaaS</u>)	59,861	65,240	71,063
Cloud Desktop-as-a-Service (<u>DaaS</u>)	2,525	3,122	3,535
Cloud Management and Security Services	34,487	42,401	51,871
Cloud System Infrastructure Services (<u>IaaS</u>)	114,786	150,310	195,446
Total Market	490,977	597,325	724,566

<https://www.gartner.com/en/newsroom/press-releases/2023-04-19-gartner-forecasts-worldwide-public-cloud-end-user-spending-to-reach-nearly-600-billion-in-2023>

Course Overview – Are you prepared?



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- FCS cloud courses
 - CSCI 5409 - Adv. Topics in Cloud Computing
 - CSCI 5410 - Serverless Data Processing
 - CSCI 5902 (5411) - Adv. Cloud Architecting
- On-line courses
 - Coursera, Udemy, Pluralsight, and so on
- Youtube

Course Overview – Are you prepared?



- Cloud certifications (AWS as an example)
 - (<https://aws.amazon.com/certification/>)
 - (<https://www.youtube.com/watch?v=fgbdtNXXR0U>)

Course Overview – Are you prepared?



- Cloud career path (AWS as an example)
<https://www.jeffersonfrank.com/insights/aws-cloud-career-paths>

Course Overview – Syllabus



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Course Overview – How do we work together



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Course Overview – How do we work together (1/2)

- Teaching
 - Fairness
 - Feedback
 - Support
 - My biggest concern
- Learning
 - Never be nervous
 - Try hard to learn by yourself
 - Ask questions
- No Saturday chat, but
- No Kahoot bonus

Course Overview – How do we work together (2/2)

- AWS Academy courses and labs
 - The course is outdated. Refer to our course slides.
 - The labs included in the course are your challenge lab assignments.
 - Don't mix the AWS Academy courses with CSCI 5410.
- AWS Academy learner lab
 - An extra place for you to practice AWS services.
- AWS certifications and exam vouchers
- Azure services