IT 2500: Cloud Computing Architecture
Spring 2023 Syllabus

Course Description

Students will develop technical expertise in cloud computing and prepare them for industry-level exams. The curriculum is delivered through instructor-led classes, knowledge assessments, hands-on labs, and project work. Students have access to course manuals, online knowledge assessments, hands-on labs, free practice certification exams, and discount vouchers for the certification exams.

Prerequisites

CS 1400 and IT 2400 both with a C- or better

Course fees

The fee for this course is $20.00. This will be use to pay for a lab assistant and replace aging hardware.

You will also be required to take a certification exam. Vouchers may be provided to reduce the cost of these certifications. You should plan on budgeting $50-$150 for these certification exams.

Sections

One section:

1. MW 1:30-2:45pm (SCC 107)

   Final exam - Monday, Dec 12, 1-2:50 pm

Instructor

Professor: Dr Joe Francom

- **Email:** `joe.francom at utahtech dot edu`
- **Phone:** 435-652-7732 (note: email preferred)
- **Office:** NBURNS 237
- **Office Hours:** See Below

Joe's Spring 2024 Schedule

Days	Time
MWF	8am - 8:50 - IT4600
MWF	9am - 9:50 - IT3110
MWF	10am - 10:50 - Office
MWF	11am - 11:50 - Office
MW	12pm - 2:00 - office hours by appointment
TR	Limited zoom office hours by appointment only

Zoom is the preferred method of office hours. See canvas for the link.

Program learning outcomes

The learning outcomes for the IT program are as follows:

```
    1. Administer computing resources to support organizational needs, including networks, operating
systems, and security configurations.
    2. Create repeatable and automated infrastructure solutions.
    3. Identify and resolve technical problems using troubleshooting techniques.
    4. Explain ethical and legal issues impacting information technology.
```

Objectives

Students will be able to:

1. Discuss cloud-based concepts and terminology. [IT PLO 1]
2. Evaluate business needs and propose cloud solutions. [IT PLO 1,3]
3. Utilize current cloud technologies to develop and implement computing solutions. [IT PLO 1,3]
4. Successfully pass an AWS accreditation exam.[IT PLO 1,3]

Resources

Texts

There is NO required text. However, if you want a text, I strongly recommend this.

Computer Labs

Each student should have their own laptop.

Course Web Site

This course has an accompanying website. You are responsible for announcements, the schedule, and other resources posted on the website. Assignments and grades will be managed using Canvas, which requires a valid Utah Tech username and password.

Assignments and Exams

Reading

Most of the course content is online. You will find all learning materials at the sites indicated.

Assignments

There are several lab exercises that you will do.

Quizzes

In general there is a quiz for each module.

Knowledge checks

Given during each module.

Exams

There are two exams that you will be required to take. Each of these has a fee associated with them. (See the voucher section above)

- Cert Cloud Practitioner (50$ after discount code) - If you pass this, you will automatically get 100% on your first exam score. (Note: only a 70% is required to pass this exam). If you do not pass, you will submit a screenshot of your score.
- Cert Solutions Architect (75$ after discount code) - If you pass this, you will get an 'A' for the course. (Note: only a 70% is required to pass this exam). If you do not pass, you will submit a screenshot of your score.

For the above exams, if you do not pass, you will received a scaled score out of 800. In each exam, your score is reported out of 1000 points possible. To obtain the certification, you need to achieve 700 or higher(70%).

You can take each exam as many times as you would like, but a voucher may only be available for the first time.

Optional exams

- There may be 2 practice AWS exams. These are taken online at your convenience. I will give you a coupon code so that they will be free. (These do not factor into your grade, but are good practice

material)

Grading

Assignments will count for 15% of your point total. Quizzes will count for 15% of your point total. Knowledge checks will be 5% of your grade. The required exams count as 65% of your grade.

Letter grades are assigned based on the percentage of possible points attained, according to the following chart:

Here is the grading scale:

```
>= 94 = A
>= 90 = A-
>= 87 = B+
>= 84 = B
>= 80 = B-
>= 77 = C+
>= 74 = C
>= 70 = C-
>= 67 = D+
>= 64 = D
<  64 = F
```

Course Policies

Absences

Students are responsible for material covered and announcements made in class. School-related absences may be made up only if prior arrangements are made. The class schedule presented is approximate. The instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and posted to the website. Exams and quizzes cannot be made up unless arrangements are made *prior* to the scheduled time.

Time

Courses should require about 45 hours of work per credit hour of class. This class will require about 135 hours of work on the part of the student to achieve a passing grade, which is approximately 9 hours per week. If you do not have the time to spend on this course, you should probably rethink your schedule.

Late work

Assignments that are turned in by the due date and that are done correctly will receive full points.

Late assignments can be turned in until the exam is given which covers the assignment. You may receive a reduced score on the late assignment.

Assignments will not be accepted after an exam has been given that relates to those earlier assignments.

Any exceptions must be discussed with the instructor. Computer failure does not qualify as an excuse for late work.

Cheating and Collaboration

It is ok to talk to each other and to get help from each other, but in the end, everything should be your own. You should NOT copy/paste. You should know what cheating is. Cheating can be penalized with an 'F' on the assignment, and 'F' in the course, and/or appropriate annotation on campus-wide student records.

Important Dates Spring 2023

```
Jan 9 - Date classes begin
Jan 13 - Last day to add without instructor permission
Jan 20 - Last day for refund of 100% tuition and fees
Jan 30 - Pell Grant census date
Jan 30 - Last day for refund of 50% tuition and fees
```

```
Feb 6 - Last day to add or audit classes with instructor permission
Mar 1 - Midterm grades posted
Mar 3 - Last day to drop an individual class
Apr 10 - Last day for complete withdrawal from all classes
Apr 26 - Last day of classes
Apr 28 - May 4 - Final Exam dates
May 9 - Final grades posted
```

Check the academic calendar for exact dates.

Disability Statement

DSU strive to make learning materials and experiences accessible for all students so If you are a student with a medical, psychological, or learning disability or anticipate physical or academic barriers based on disability, you are welcome to let me know so we can discuss options. Students with documented disabilities are required to contact the Disability Resource Center located in the North Plaza Building, Next to the Testing Center (435-652-7516) to explore eligibility process and reasonable accommodations related to disability.

Title IX Statement

DSU seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment/misconduct/assault we encourage you to report this to the college's Title IX Director, Cindy Cole, (435) 652-7731, cindy.cole@dixie.edu. If you report to a faculty member, she or he must notify the Title IX Director about the basic facts of the incident.

Email Disclaimer

You are required to frequently check your campus email account. Important class and university information will be sent to your campus email account, including Utah Tech bills, financial aid/scholarship notices, notices of canceled classes, reminders of important dates and deadlines, and other information critical to your success at Utah Tech and in your courses. To access your campus email account, visit mail.utahtech.edu. Your username is your Digital ID (e.g. D00111111) If you have forgotten your PIN, visit my.utahtech.edu and click the "Forgot Pin" button.

College Policies

Policy for absences related to college functions

Disability Resource Center

IT Help Desk

Library

Testing Center

Tutoring Center